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Standardizing and interpreting nesting records for Great Blue Herons in British Columbia

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Abstract

Historical data on the number of nests and nesting success for 242 Great Blue Heron colonies in British Columbia from 1920 through 1999 were compiled. The methodologies for data collection differed over the years. We have developed and applied a standard methodology for collecting and interpreting nesting data to provide consistency for users of the data set.

Introduction

Survey data on the number of nesting Great Blue Herons *Ardea herodias* over wide geographical areas are often uneven and difficult to interpret (Dunn et al. 1985). Techniques have been developed to account for bias and missing data when estimating the number of breeding herons in a region (Dunn et al. 1985). As a first step, it is necessary to treat all data in a consistent manner. Our purpose here is to describe data collection methods and apply a protocol to the historical data to create a standardized data set for future analysis.

The subspecies of Great Blue Heron inhabiting the coast of British Columbia (*Ardea herodias fannini*) was designated as "vulnerable" in 1997 by the Committee on the Status of Endangered Wildlife in Canada. The need to estimate population trends accurately has become essential as a means of measuring the success of recovery efforts (Butler and Baudin 2000; Gebauer and Moul 2000). Records of the number of nests and the reproductive success of Great Blue Herons in colonies in British Columbia date from 1920. These records range from anecdotal reports to data systematically collected during research projects. Over the years, these records have been compiled for various studies and have been presented in journals and government reports (e.g., Forbes et al. 1985; Elliott et al. 1989; Butler et al. 1995; Butler 1997). Interpretation of the data was left up to the individual user. Moreover, most of the variation in nesting success originates from failed nesting attempts (Vennesland 2000), which were not estimated in early censuses. The purpose of this paper is to provide a protocol for data collection and interpretation.

Methods

Field data collection methodology

Beginning in 1988, Breault (1988, 1989, 1990), followed by Moul (1991, 1992, 1993, 1994, 1995), established a methodology to measure heron nest success and productivity. Herons return to colonies beginning in late January and February. They require about 14 weeks to complete a reproductive cycle: courtship lasts about two weeks, incubation and egg laying about four weeks, and chick rearing about eight weeks. During a nesting season, at least six visits were to be made to each active colony. The first colony visit occurred from late March through mid May to establish the presence of nesting herons. Colonies in the southern portion of Vancouver Island began in late March, whereas colonies in the northern portion of the Strait of Georgia began as late as late May. A second colony visit between late April and early June was made to estimate the hatching date. With incubation and the hatching period being the most sensitive time for disturbance of the herons (Vos et al. 1985; Rodgers and Smith 1995), care was taken when approaching the colony to prevent disturbing the herons from nests. Calling chicks could be heard approximately 25 m from colonies. In addition, observations of herons presenting sticks to their mates near the expected hatching date were accepted as a sign of chick hatching (Butler 1997). Herons toss the shells of hatched eggs from nests as the eggs hatch, so we searched below the nests for shell fragments at the time of hatching at a few colonies habituated to people below their nests.

Following the estimation of the earliest hatching date, the earliest fledging date (eight weeks later) was calculated, and three colony visits were timed to count chicks when they were about five, seven, and nine weeks old. Additional visits were planned to account for late-nesting pairs. A final colony visit was made in the fall, usually once the leaves had fallen in late November, to count all nests.

Protocol applied to historical data

Great Blue Heron nesting records were obtained from books and journal papers (Cannings et al. 1987; Elliott et al. 1989; Butler et al. 1995; Butler 1997), unpublished reports (Forbes et al. 1985; Breault 1988, 1989, 1990; Moul 1991, 1992, 1993, 1994, 1995, 1998a, 1998b, 1999a, 1999b, 2000a, 2000b; Gebauer 1995a, 1995b), and recent unpublished records collected by the authors. The data were fit into fixed numeric value fields so that the records would be in a suitable format for computer mapping and geographical information

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Table 1
Text and numeric fields applied to historical Great Blue Heron nesting data

Field name	Description
COLONY ID CODE	A unique colony identification code
COLONY NAME	A geographic or cadastral name reference near to the site
LOCALITY	Name of nearest city, town, or local municipality
TOTAL NESTS	The total number of nests counted, which may include old unused nests
ACTIVE NESTS	The total or estimated number of nests used in a given year
SAMPLE SIZE	The number of active nests used to estimate nest success and productivity
SUCCESSFUL NESTS	The number of nests that fledged at least one chick
NUMBER OF CHICKS	The number of chicks that fledged from sampled nests
SOURCE	A reference to the published or unpublished report used as a data source

system (GIS) applications (Table 1). These data are available in GIS format from the B.C. Ministry of Environment, Lands and Parks, Nanaimo, B.C., or from the Canadian Wildlife Service office in Delta, B.C.

All colony records were assigned an alpha-numeric code: H for Great Blue Heron, followed by numerals to indicate the B.C. Ministry of Environment, Lands and Parks Wildlife Management Region and Management Unit and a three-digit colony number. For example, a colony in Stanley Park was assigned the code H208-002, where H refers to herons, 2 refers to Wildlife Management Region 2 (i.e., Lower Mainland), 08 refers to Management Unit 8 (i.e., north of the Fraser River and west of Mission), and -002 refers to colony number 2. All colony names that had previously incorporated a personal surname or a corporate name were changed to either a street name or some geographic feature near the site in question in order to address privacy concerns of landowners.

The data were presented either as colony summaries or as observations at individual heron nests. Nest records were tallied (procedure B, below) from the latter to match other sites and to provide data for a summary for each year.

A) Colony records

For colony productivity summaries, the following procedure, assumptions, and default choices were used:

1) If no nest numbers were reported, yet the colony was listed as active, default to TOTAL NESTS = 1 and ACTIVE NESTS = 1.
2) If no nest numbers were reported, yet the colony was listed as inactive, default to TOTAL NESTS = 1 and ACTIVE NESTS = 0.
3) If the colony was reported as active and only the total number of nests was given, default to ACTIVE NESTS = TOTAL NESTS (see Dunn et al. 1985 for a method to derive a correction factor).
4) If the colony was reported as active and only the number of active nests was given, default to TOTAL NESTS = ACTIVE NESTS.
5) TOTAL NESTS must be greater than or equal to ACTIVE NESTS.
6) SAMPLE SIZE cannot be greater than ACTIVE NESTS.
7) SUCCESSFUL NESTS cannot be greater than SAMPLE SIZE.
8) If the colony was reported as successful, yet no numbers of successful nests were given, default to SUCCESSFUL NESTS = 1.
9) If a range of years was reported, all years of that range were used.
10) If a range of nest numbers was reported (either TOTAL NESTS or ACTIVE NESTS), the midpoint or lower whole number was used (if the result was a decimal).
11) If a colony was reported to be active, yet no nest numbers were given, the number of nests reported to be active in the nearest year was used. If the year was midway between two years of differing known nest numbers, the lower number was used.
12) If a range of years was given, the colony was reported to be active, and no nest numbers were given during those years, yet the colony size was reported within five years of the range, that number or the lower of two numbers was used for TOTAL NESTS and/or ACTIVE NESTS.
13) When historic records represented a calculated ratio of chicks per active nest and a SAMPLE SIZE, the NUMBER OF CHICKS (in the sample set) was back-calculated to the nearest whole number.
14) If chicks per successful nest were reported, it was assumed that only successful nests were recorded, and SAMPLE SIZE was left blank. If possible, the NUMBER OF CHICKS was back-calculated to the nearest whole number using the number of SUCCESSFUL NESTS.
15) When cataloguing sources, reports were cited in preference to the original citation or personal communications.

B) Nest records

For data on individual nests, the following procedure, assumptions, and default choices were used:

1) A nest was scored as an ACTIVE NEST during the breeding season when birds were present in the nest and/or feces were observed on foliage or the ground below the nest. Following the breeding season, when leaves had fallen from nest trees, a nest was scored as having been active in the previous season if it appeared "well formed" and in "good condition" compared with obviously old and unused nests. Any record showing a nest to have been active for any duration of time during a nesting season was scored as an ACTIVE NEST.
2) The SAMPLE SIZE in data sets of individual nests was defined as the sum of the ACTIVE NESTS selected to calculate the colony productivity summary. Sample nests were chosen for their ease of observation. The sample set also included some less easily observed nests where sightings of chicks were made during two or more colony visits if at least one of the sightings was within two weeks prior to the estimated fledging date.
3) A nest was scored as a SUCCESSFUL NEST if one or more chicks were observed in the nest during two of the colony visits (weeks five, seven, or nine).
4) The NUMBER OF CHICKS fledged from an individual nest was determined by the greatest number of chicks counted during colony visits on weeks five, seven, and nine.

Results and discussion

Nine hundred and eight records representing 242 Great Blue Heron colonies from 1920 to 1999 were catalogued. There were 103 colony sites reported on Vancouver Island (Appendix 1), 86 colony sites in the Lower Fraser Valley, Sunshine Coast, and Powell River areas (Appendix 2), six colony sites on the North Coast and in the Queen Charlotte Islands (Appendix 3), and 47 colony sites in the interior of British Columbia (Appendix 4). Extensive search efforts in recent years in areas such as Vancouver Island and the Lower Fraser Valley suggest that the numbers given for these areas are more likely to approximate the actual number present than numbers given for the Queen Charlotte Islands, the North Coast, and interior regions, where less effort has been expended.

There are several sources of potential error in our methodology. Defaulting so that TOTAL NESTS = ACTIVE NESTS in situations where counts were not made likely resulted in over- or underestimates of the true numbers present. Defaulting TOTAL NESTS, ACTIVE NESTS, or SUCCESSFUL NESTS to equal "1" likely underestimated the true number of nests in most cases. Defaulting to "1" was used as a "flag" for missing data or data irregularities. In addition, many colony records represented a single visit to a colony, which would increase the likelihood of missing nests occupied for a brief period before abandonment. This would result in an underestimate of the number of nesting starts and the nesting success of the colony. A method similar to that used by Dunn et al. (1985) to derive a correction factor for the estimate of the number of active nests could be applied to these data. Our purpose here is to archive the raw data rather than estimate the number of nesting herons.

The survey methods employed from 1988 onwards were more consistent than those used in years pre-1988 and allow for a comparison by region and, in some cases, by colony. Pre-1988 surveys hold value as historical benchmarks and may generally be compared at least at some abbreviated level (e.g., as chicks per successful nest) with more recent surveys. Vancouver Island and the Lower Mainland are relatively large geographical regions with many places for herons to nest, and it is expected that some colonies have been missed. In contrast, the Sunshine Coast is a comparatively small region, with easy access to beaches where herons forage and with many roads to provide access to potential nesting sites within about 2 km of the shore. Given the search effort over the past 20 years, it is less likely that colonies have been overlooked. We recommend that future researchers follow the protocol we outline in this note to provide consistency in data collection methods and interpretation of data sets.

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Appendix 1
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H101-001	Beacon Hill	Victoria	1999	48	48	46	7	10	Vennesland (2000)
H101-001	Beacon Hill	Victoria	1998	20	20	20	7	17	Moul (1999a)
H101-001	Beacon Hill	Victoria	1997	10	10	10	1	2	Moul (1998a)
H101-001	Beacon Hill	Victoria	1996	12	12	12	3		Moul (1998a)
H101-001	Beacon Hill	Victoria	1990	27	27	27	0		Breault (1990)
H101-001	Beacon Hill	Victoria	1989	55	55	31	19	45	Breault (1989)
H101-001	Beacon Hill	Victoria	1988	64	63	50	37	74	Breault (1988)
H101-002	Government House	Victoria	1999	0	0				Moul (2000)
H101-002	Government House	Victoria	1998	5	0				Moul (1999a)
H101-002	Government House	Victoria	1997	6	6	6	0		Moul (1998a)
H101-002	Government House	Victoria	1996	7	7				Moul (1998a)
H101-003	Tillicum	Saanich	1998		0				Moul (1999a)
H101-003	Tillicum	Saanich	1997	2	0				Moul (1998a)
H101-003	Tillicum	Saanich	1996		0				Moul (1998a)
H101-003	Tillicum	Saanich	1995		0				Moul (1995)
H101-003	Tillicum	Saanich	1994		0				Moul (1994)
H101-003	Tillicum	Saanich	1993	11	11	11	0		Moul (1993)
H101-003	Tillicum	Saanich	1992	17	17	14	13	23	Moul (1992)
H101-003	Tillicum	Saanich	1991	24	24	13	0		Moul (1991)
H101-003	Tillicum	Saanich	1990	44	44	26	8	24	Breault (1990)
H101-003	Tillicum	Saanich	1989	21	21	18	12	31	Breault (1989)
H101-004	Sidney Island	Sidney	1997		0				Moul (1998a)
H101-004	Sidney Island	Sidney	1990	16	16	16	0		Butler (1997)
H101-004	Sidney Island	Sidney	1989	44	44	44	0		Butler (1997)
H101-004	Sidney Island	Sidney	1988	99	99	75	58	135	Butler (1997)
H101-004	Sidney Island	Sidney	1987	103	85	85	54	125	Butler (1997)
H101-004	Sidney Island	Sidney	1986	86	51				Elliott et al. (1989) Butler (1997) Elliott et al. (1989)
H101-004	Sidney Island	Sidney	1984	41	41	41	0		Butler (1997)
H101-004	Sidney Island	Sidney	1979	75	75				Forbes et al. (1985)
H101-004	Sidney Island	Sidney	1974	30	30				Forbes et al. (1985)
H101-005	McFadden Creek	Saltspring Island	1999	131	131	26	13	25	Vennesland (2000)
H101-005	McFadden Creek	Saltspring Island	1998	120	120	17	16	35	Moul (1999a)
H101-005	McFadden Creek	Saltspring Island	1997	118	118	21	19	51	Moul (1998a)
H101-005	McFadden Creek	Saltspring Island	1996	118	118				Moul (1998a)
H101-005	McFadden Creek	Saltspring Island	1990	1	1				Moul (1998a)
H101-006	Southey Point	Saltspring Island	1997		0				Moul (1998a)
H101-006	Southey Point	Saltspring Island	1989	25	21	21	15	28	Breault (1989)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H101-006	Southey Point	Saltspring Island	1980	4	4				Forbes et al. (1985)
H101-007	Madrona Creek	Saltspring Island	1997		0				Moul (1998a)
H101-007	Madrona Creek	Saltspring Island	1996	15	0				Moul (1998a)
H101-007	Madrona Creek	Saltspring Island	1994	15	15				Moul (1998a)
H101-008	Heron Basin	Sidney	1998		0				Moul (1999a)
H101-008	Heron Basin	Sidney	1997	3	0				Moul (1998a)
H101-009	Colwood-CFB	Victoria	1999	36	0				Vennesland (2000)
H101-009	Colwood-CFB	Victoria	1998	16	16	16	0		Moul (1999a)
H101-010	Cadboro Bay	Victoria	1999	3	3				Moul (2000)
H101-010	Cadboro Bay	Victoria	1998	1	1				Moul (1999a)
H101-011	Inskip Island	Victoria	1999		0				Moul (2000)
H101-011	Inskip Island	Victoria	1998	5	5				Moul (1999a)
H101-012	View Royal	Victoria	1999	10	10	10	0		Moul (1999a)
H101-013	Chatham Island	Oak Bay	1929	1	1				Forbes et al. (1985)
H101-014	Gabriola Island	Gabriola Island	1981	90	64				Forbes et al. (1985)
H101-014	Gabriola Island	Gabriola Island	1980	60	60				Butler (1997)
H101-014	Gabriola Island	Gabriola Island	1979	30	30				Butler (1997)
H101-015	Mandarti Island	Sidney	1950	1	1				Butler (1997)
H101-015	Mandarti Island	Sidney	1945	7	7				Forbes et al. (1985)
H101-015	Mandarti Island	Sidney	1936	1	1				Butler (1997)
H101-016	North Pender	North Pender	1974	1	1	1	1	1	Butler (1997)
H101-017	Portage Inlet	Victoria	1977	5	5				Forbes et al. (1985)
H101-018	Prevost Island	Saltspring Island	1974	59	59				Butler (1997)
H101-019	Beddis Road	Saltspring Island	1985		0				N. Raginsky (pers. comm.)
H101-019	Beddis Road	Saltspring Island	1981	70	70				N. Raginsky (pers. comm.)
H101-020	Saturna	Saturna Island	1920	1	1				Forbes et al. (1985)
H101-021	Secretary Island	Gulf Islands	1935	44	44				Butler (1997)
H101-021	Secretary Island	Gulf Islands	1934	12	12				Butler (1997)
H101-021	Secretary Island	Gulf Islands	1933	4	4				Butler (1997)
H101-021	Secretary Island	Gulf Islands	1932	1	1				Butler (1997)
H101-022	Thetis Lake	Victoria	1974	1	1				Forbes et al. (1985)
H101-022	Thetis Lake	Victoria	1962	8	8				Forbes et al. (1985)
H101-023	South Pender	S. Pender Island	1975	1	1	1	1	2	Forbes et al. (1985)
H101-024	Swartz Bay	Sidney	1970	1	1				Butler (1997)
H101-024	Swartz Bay	Sidney	1963	5	5				Butler (1997)
H101-025	Tsehum Harbour	Sidney	1957	11					Forbes et al. (1985)
H101-026	Saanichton Bay	Saanich	1999	35	29				Moul (2000)
H102-001	Whiffin Spit	Sooke	1999	17	16	16	0		Vennesland (2000)
H102-001	Whiffin Spit	Sooke	1998	46	40	40	0		Moul (1999a)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H102-001	Whiffin Spit	Sooke	1997	50	31	31	7	14	Moul (1998a)
H102-001	Whiffin Spit	Sooke	1996	43	43				Moul (1998a)
H102-001	Whiffin Spit	Sooke	1992	41	41				Moul (1992)
H102-001	Whiffin Spit	Sooke	1961	20	12				Butler (1997)
H102-001	Whiffin Spit	Sooke	1960	23	23				Butler (1997)
H102-002	Mill Bay	Mill Bay	1999	15	9	9	0		Vennesland (2000)
H102-002	Mill Bay	Mill Bay	1998	14	14	14	3	7	Moul (1999a)
H102-002	Mill Bay	Mill Bay	1997	8	8	3	3	7	Moul (1998a)
H102-003	Otter Point	Sooke	1961	8	8				Forbes et al. (1985)
H102-003	Otter Point	Sooke	1960	6	6				Butler (1997)
H102-004	Stoney Creek	Sooke	1961	2	2				Butler (1997)
H102-005	Cherry Point	Cowichan Bay	1939	1	1				Forbes et al. (1985)
H104-001	Quamichan Lake	Duncan	1997		0				Moul (1998a)
H104-001	Quamichan Lake	Duncan	1994		0				Moul (1994)
H104-001	Quamichan Lake	Duncan	1993	11	11	11	0		Moul (1993)
H104-001	Quamichan Lake	Duncan	1992	19	19	19	0		Moul (1992)
H104-001	Quamichan Lake	Duncan	1991	28	28	27	24	61	Moul (1991)
H104-001	Quamichan Lake	Duncan	1990	28	28	28	20	56	Breault (1990)
H104-001	Quamichan Lake	Duncan	1989	32	32	30	27	68	Breault (1989)
H104-002	Sahtlam	Duncan	1997		0				Moul (1998a)
H104-002	Sahtlam	Duncan	1996	11	0				Moul (1998a)
H104-002	Sahtlam	Duncan	1991	15	0				Moul (1991)
H104-002	Sahtlam	Duncan	1990	3	3	3	2	3	Breault (1990)
H104-002	Sahtlam	Duncan	1989	6	6	6	4	9	Breault (1989)
H104-003	Drinkwater Road	Duncan	1999	85	71	34	27	46	Vennesland (2000)
H104-003	Drinkwater Road	Duncan	1998	26	26	26			Moul (1999a)
H104-003	Drinkwater Road	Duncan	1997	35	19	19	5	14	Moul (1998a)
H104-004	Youbou	Cowichan Lake	1997		0				Moul (1998a)
H104-004	Youbou	Cowichan Lake	1990	1	1	1	1	2	Breault (1990)
H104-004	Youbou	Cowichan Lake	1989	1	1	1	1	4	Breault (1989)
H104-005	Cobble Hill	Duncan	1979	1	1				Forbes et al. (1985)
H104-005	Cobble Hill	Duncan	1978	6	6				Forbes et al. (1985)
H104-006	Cowichan	Duncan	1990	1	1	1	0		Butler (1997)
H104-006	Cowichan	Duncan	1989	1	1	1	0		Butler (1997)
H104-007	Cowichan Bay Village	Cowichan Bay	1979	34	28				Forbes et al. (1985)
H104-007	Cowichan Bay Village	Cowichan Bay	1973	12	12				Forbes et al. (1985)
H104-007	Cowichan Bay Village	Cowichan Bay	1952	32	32				Butler (1997)
H104-007	Cowichan Bay Village	Cowichan Bay	1950	32					Forbes et al. (1985)
H104-007	Cowichan Bay Village	Cowichan Bay	1945	2	2				Butler (1997)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H104-007	Cowichan Bay Village	Cowichan Bay	1931	8	8				Butler (1997)
H104-008	Cowichan Station	Cowichan Bay	1979		0				Forbes et al. (1985)
H104-008	Cowichan Station	Cowichan Bay	1977	8	8				Forbes et al. (1985)
H104-008	Cowichan Station	Cowichan Bay	1975	27	27				Forbes et al. (1985)
H104-008	Cowichan Station	Cowichan Bay	1973	12	12				Forbes et al. (1985)
H104-008	Cowichan Station	Cowichan Bay	1972	9	7				Forbes et al. (1985)
H104-009	Genoa Bay	Cowichan Bay	1979	9	9				Butler (1997)
H104-009	Genoa Bay	Cowichan Bay	1975		0				Forbes et al. (1985)
H104-009	Genoa Bay	Cowichan Bay	1972	17	10				Forbes et al. (1985)
H104-009	Genoa Bay	Cowichan Bay	1971	22	22				Forbes et al. (1985)
H104-009	Genoa Bay	Cowichan Bay	1970	16	13				Forbes et al. (1985)
H105-001	Shoal Island	Crofton	1998		0				Moul (1999a)
H105-001	Shoal Island	Crofton	1997	20	0				Moul (1998a)
H105-001	Shoal Island	Crofton	1996		0				Moul (1998a)
H105-001	Shoal Island	Crofton	1995	40	40	40	0		Moul (1995)
H105-001	Shoal Island	Crofton	1994	63	63	57	22	62	Moul (1994)
H105-001	Shoal Island	Crofton	1993	63	63	52	14	36	Moul (1993)
H105-001	Shoal Island	Crofton	1992	61	61	52	16	34	Moul (1992)
H105-001	Shoal Island	Crofton	1991	47	47	42	30	75	Moul (1991)
H105-001	Shoal Island	Crofton	1990	32	32	31	22	69	Breault (1990)
H105-001	Shoal Island	Crofton	1989	25	25	25	21	55	Moul (1990)
H105-001	Shoal Island	Crofton	1988	35	35	35	0		Moul (1990)
H105-001	Shoal Island	Crofton	1987	60	57	60	0		Butler (1989)
									Elliott et al. (1989)
H105-001	Shoal Island	Crofton	1986	64	64		40		Elliott et al. (1989)
H105-001	Shoal Island	Crofton	1982	20					Forbes et al. (1985)
H105-001	Shoal Island	Crofton	1979	1	1				Butler (1997)
H105-001	Shoal Island	Crofton	1975	75	75				Butler (1997)
H105-001	Shoal Island	Crofton	1974	130	85				Butler (1997)
H105-001	Shoal Island	Crofton	1973	59	52				Butler (1997)
H105-001	Shoal Island	Crofton	1970	40	40				Butler (1997)
H105-002	Holden Lake	Nanaimo	1999	43	26	20	8	17	Vennesland (2000)
H105-002	Holden Lake	Nanaimo	1998	21	21	20	17	44	Moul (1999a)
H105-002	Holden Lake	Nanaimo	1997	72	16	16	3	5	Moul (1999a)
H105-002	Holden Lake	Nanaimo	1996	90	72				Moul (1998a)
H105-002	Holden Lake	Nanaimo	1995	90	90				Moul (1995)
H105-002	Holden Lake	Nanaimo	1994	104	83				Moul (1994)
H105-002	Holden Lake	Nanaimo	1993	101	86	86	39	65	Moul (1993)
H105-002	Holden Lake	Nanaimo	1992	115	113	78	73	154	Moul (1992)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H105-002	Holden Lake	Nanaimo	1991	120	90	37	31	53	Moul (1991)
H105-002	Holden Lake	Nanaimo	1990	132	132		36	107	Breault (1990)
H105-002	Holden Lake	Nanaimo	1989	162	162	45	38	73	Breault (1989)
H105-002	Holden Lake	Nanaimo	1988	100	100	44	41	75	Breault (1988)
H105-003	Hammond Bay	Nanaimo	1992	0	0				Moul (1992)
H105-003	Hammond Bay	Nanaimo	1991	15	15	15	0		Moul (1991)
H105-003	Hammond Bay	Nanaimo	1990	19	19	17	14	37	Breault (1990)
H105-003	Hammond Bay	Nanaimo	1989	16	16	15	9	19	Breault (1989)
H105-003	Hammond Bay	Nanaimo	1988	24	24	22	13	21	Breault (1988)
H105-004	Brannen Lake	Nanaimo	1997	0	0				Moul (1998a)
H105-004	Brannen Lake	Nanaimo	1992	7	7	7	0		Moul (1992)
H105-004	Brannen Lake	Nanaimo	1991	2	2				MELP files
H105-005	Northwest Bay	Parksville	1997	0	0				Moul (1998a)
H105-005	Northwest Bay	Parksville	1992		0				Moul (1992)
H105-005	Northwest Bay	Parksville	1991	8	8	8	1	2	Moul (1991)
H105-005	Northwest Bay	Parksville	1990	11	11		8	28	Breault (1990)
H105-005	Northwest Bay	Parksville	1989	8	8	8	7	19	Breault (1989)
H105-006	Soriel Road	Parksville	1998		0				Moul (1999a)
H105-006	Soriel Road	Parksville	1997	1	0				Moul (1998a)
H105-006	Soriel Road	Parksville	1993	4	4				Moul (1993)
H105-007	Protection Island	Nanaimo	1999		0				Moul (2000)
H105-007	Protection Island	Nanaimo	1998	9	0				Moul (1999a)
H105-007	Protection Island	Nanaimo	1997	5	5				Moul (1998a)
H105-008	Beachcomber	Nanoose Bay	1999	10	3	3	0		Vennesland (2000)
H105-008	Beachcomber	Nanoose Bay	1998	12	12	12	4	7	Moul (1999a)
H105-008	Beachcomber	Nanoose Bay	1997	5	5				Moul (1998a)
H105-009	Cottle Creek	Nanaimo	1999	4	0				Moul (2000)
H105-009	Cottle Creek	Nanaimo	1998	7	7				Moul (1999a)
H105-010	Jingle Pot Road	Nanaimo	1999	0	0				Moul (2000)
H105-011	Ladysmith	Ladysmith	1939	1	1				Forbes et al. (1985)
H105-012	Cedar Road	Nanaimo	1981	60					Forbes et al. (1985)
H105-013	Extention	Nanaimo	1981	1	1				Forbes et al. (1985)
H105-013	Extention	Nanaimo	1980	1	1				Forbes et al. (1985)
H105-013	Extention	Nanaimo	1972	3	3				Butler (1997)
H105-014	Yellowpoint	Ladysmith	1972	10	10				Forbes et al. (1985)
H105-015	Nanoose	Nanoose Bay	1980	8	8				Butler (1997)
H105-016	Parksville	Parksville	1981	6	6				Forbes et al. (1985)
H105-017	Acacia Road	Parksville	1992	1	1	1	0		Moul (1992)
H105-017	Acacia Road	Parksville	1991	1	1	1	0		Moul (1991)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H105-017	Acacia Road	Parksville	1990	1	1	1	1	4	Butler (1997)
H105-017	Acacia Road	Parksville	1989	1	1	1	1	4	Butler (1997)
H105-017	Acacia Road	Parksville	1988	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1987	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1986	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1985	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1984	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1983	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1982	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1981	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1980	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1979	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1978	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1977	1	1	1	1		Moul (1992)
H105-018	Gravel Pitt	Parksville	1990	10	10	10	0		Butler (1997)
H105-018	Gravel Pitt	Parksville	1989	9	9	9	9	23	Butler (1997)
H105-019	Industrial Way	Parksville	1988	4	4		0		Breault (1988)
H105-019	Industrial Way	Parksville	1987	1	1				Breault (1988)
H105-020	Englishman River	Parksville	1999	4	4				Moul (2000)
H106-001	North-west	Denman Island	1998	13	0				Moul (1999a)
H106-001	North-west	Denman Island	1997	22	3	3	1		Moul (1998a)
H106-001	North-west	Denman Island	1996	22	22				Moul (1998a)
H106-001	North-west	Denman Island	1991	14	14	14	2	4	Moul (1991)
H106-001	North-west	Denman Island	1990	4	4	4	1	3	Breault (1990)
H106-001	North-west	Denman Island	1989	17	17	17	16	46	Breault (1989)
H106-002	North End	Denman Island	1998	0	0				Moul (1999a)
H106-002	North End	Denman Island	1997	5	0				Moul (1998a)
H106-002	North End	Denman Island	1996	5	0				Moul (1998a)
H106-002	North End	Denman Island	1991	5	5	5	0		Moul (1991)
H106-002	North End	Denman Island	1990	18	18	18	0		Breault (1990)
H106-002	North End	Denman Island	1989	5	5	5	2	5	Breault (1989)
H106-002	North End	Denman Island	1980	9					Forbes et al. (1985)
H106-003	Denman Point	Denman Island	1999	11	0				Vennesland (2000)
H106-003	Denman Point	Denman Island	1998		0				Moul (1999a)
H106-003	Denman Point	Denman Island	1997	11	3	3	0		Moul (1998a)
H106-003	Denman Point	Denman Island	1996	11	11				Moul (1998a)
H106-003	Denman Point	Denman Island	1991	22	22	22	11	29	Moul (1991)
H106-003	Denman Point	Denman Island	1990	24	24	24	15	46	Breault (1990)
H106-003	Denman Point	Denman Island	1989	24	24	20	13	37	Breault (1989)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H106-004	Fillongley South	Denman Island	1996	13	0				Moul (1998a)
H106-004	Fillongley South	Denman Island	1991	13	0				Moul (1991)
H106-004	Fillongley South	Denman Island	1990	18	18	15	5	15	Breault (1990)
H106-004	Fillongley South	Denman Island	1989	15	15	14	7	16	Breault (1989)
H106-005	Landing	Hornby Island	1998	0	0				Moul (1999a)
H106-005	Landing	Hornby Island	1997	0	0				Moul (1998a)
H106-005	Landing	Hornby Island	1991	10	10	10	0		Moul (1991)
H106-005	Landing	Hornby Island	1990	9	9	5	4	11	Breault (1990)
H106-005	Landing	Hornby Island	1989	7	7	6	6	22	Breault (1989)
H106-006	Tralee 1	Hornby Island	1998	0	0				Moul (1999a)
H106-006	Tralee 1	Hornby Island	1997	7	0				Moul (1998a)
H106-006	Tralee 1	Hornby Island	1996	7	0				Moul (1998a)
H106-006	Tralee 1	Hornby Island	1991	0	0				Moul (1991)
H106-006	Tralee 1	Hornby Island	1990	17	17	17	4	10	Breault (1990)
H106-006	Tralee 1	Hornby Island	1989	15	15	15	15	34	Breault (1989)
H106-007	Tralee 2	Hornby Island	1998	0	0				Moul (1999a)
H106-007	Tralee 2	Hornby Island	1997	12	0				Moul (1998a)
H106-007	Tralee 2	Hornby Island	1996	12	2				Moul (1998a)
H106-007	Tralee 2	Hornby Island	1991	26	26	23	18	38	Moul (1991)
H106-007	Tralee 2	Hornby Island	1990	9	9	9	1	3	Breault (1990)
H106-007	Tralee 2	Hornby Island	1989	18	18	18	17	48	Breault (1989)
H106-008	Tralee Point	Hornby Island	1999	53	50	50	13	23	Vennesland (2000)
H106-008	Tralee Point	Hornby Island	1998	50	44	44	36	62	Moul (1999a)
H106-008	Tralee Point	Hornby Island	1997	40	38	24	17	48	Moul (1998a)
H106-008	Tralee Point	Hornby Island	1996	50	50				Moul (1998a)
H106-008	Tralee Point	Hornby Island	1991	0	0				Moul (1991)
H106-008	Tralee Point	Hornby Island	1990	32	32	24	22	42	Breault (1990)
H106-009	Fanny Bay	Fanny Bay	1997	3	0				Moul (1998a)
H106-009	Fanny Bay	Fanny Bay	1996	3	0				Moul (1998a)
H106-009	Fanny Bay	Fanny Bay	1991	10	0				Moul (1991)
H106-009	Fanny Bay	Fanny Bay	1988	15	15	15	3	7	Breault (1988)
H106-010	Union Bay South	Union Bay	1997	0	0				Moul (1998a)
H106-010	Union Bay South	Union Bay	1996		0				Moul (1998a)
H106-010	Union Bay South	Union Bay	1992		0				Moul (1992)
H106-010	Union Bay South	Union Bay	1991	8	6				Moul (1991)
H106-011	Union Bay North	Union Bay	1997	0	0				Moul (1998a)
H106-011	Union Bay North	Union Bay	1996	0	0				Moul (1998a)
H106-011	Union Bay North	Union Bay	1991	2	0				Moul (1991)
H106-011	Union Bay North	Union Bay	1988	6	6	6	3	6	Breault (1988)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H106-012	Union Bay	Union Bay	1999	26	19				M.B. Gebauer (unpublished)
H106-012	Union Bay	Union Bay	1998	5	0				Moul (1999a)
H106-013	Little River	Comox	1998	0	0				Moul (1999a)
H106-013	Little River	Comox	1997	14	0				Moul (1998a)
H106-013	Little River	Comox	1996	24	0				Moul (1998a)
H106-013	Little River	Comox	1992	44	44	32	32	72	Moul (1992)
H106-013	Little River	Comox	1991	28	28	25	24	57	Moul (1991)
H106-013	Little River	Comox	1990	27	27	20	16	62	Breault (1990)
H106-013	Little River	Comox	1989	22	22	18	16	44	Breault (1989)
H106-014	Royston	Royston	1999	27	27	27	0		Vennesland (2000)
H106-014	Royston	Royston	1998	30	25	25	9	23	Moul (1999a)
H106-014	Royston	Royston	1997	19	18	5	5	13	Moul (1998a)
H106-015	Kitty-coleman Creek	Merville	1999	31	1	1	0		Vennesland (2000)
H106-015	Kitty-coleman Creek	Merville	1998	31	17	17	0		Moul (1999a)
H106-015	Kitty-coleman Creek	Merville	1997	25	19	8	8	14	Moul (1998a)
H106-016	Cougar Creek	Fanny Bay	1987	2	2				MELP files
H106-017	Rosewall Creek	Fanny Bay	1987	10	10				MELP files
H106-018	Cook Creek	Fanny Bay	1987	2	2				MELP files
H106-019	Cougar Smith Creek	Fanny Bay	1987	9	9				MELP files
H106-020	Cumberland Road	Comox	1980	19	19				Butler (1997)
H106-021	Bowser	Bowser	1976		0				Forbes et al. (1985)
H106-021	Bowser	Bowser	1975	18	18				Butler (1997)
H106-022	Killman Road	Union Bay	1999	5	5				Moul (2000)
H106-023	Whalebone Point	Denman Island	1981	70	70				Forbes et al. (1985)
H106-023	Whalebone Point	Denman Island	1980	45	45				Forbes et al. (1985)
H106-024	C.R. Airport	Campbell River	1988	1	1				Breault (1988)
H106-025	Hornby	Hornby Island	1966	34					Forbes et al. (1985)
H106-025	Hornby	Hornby Island	1962	16	16				Forbes et al. (1985)
H106-025	Hornby	Hornby Island	1961	33	30				Forbes et al. (1985)
H106-025	Hornby	Hornby Island	1960	30	30				Forbes et al. (1985)
H106-025	Hornby	Hornby Island	1959	30					Forbes et al. (1985)
H106-026	St. John's Point	Hornby Island	1962	1	1				Forbes et al. (1985)
H107-001	Somass River	Port Alberni	1992		0				Moul (1992)
H107-001	Somass River	Port Alberni	1971	10	10				Butler (1997)
H107-002	Alberni Inlet west	Port Alberni	1999		0				Moul (2000)
H110-001	Elk Falls	Campbell River	1987	10	10	10	0		MELP files
H110-002	Tree Nursery A	Campbell River	1987	15	0				MELP files
H110-003	Tree Nursery B	Campbell River	1988	3	3	3	0		Breault (1988)
H110-004	Tree Nursery C	Campbell River	1988	2	2				Breault (1988)

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Appendix 1 (*cont'd*)
Great Blue Heron colony records for Vancouver Island, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H110-005	Menzies Bay	Campbell River	1997	1					MELP files
H112-001	Ceepeecee	Ceepeecee	1991	4	4				MELP files
H112-002	Tahsis	Tahsis	1989	10	10				Breault (1989)
H115-001	Smelt Bay	Cortes Island	1999	3	3				Moul (2000)
H115-001	Smelt Bay	Cortes Island	1998	5	2				Moul (1999a)
H115-001	Smelt Bay	Cortes Island	1997	0	0				Moul (1998a)
H115-001	Smelt Bay	Cortes Island	1996	0	0				Moul (1998a)
H115-001	Smelt Bay	Cortes Island	1992	12	12	12	2	2	Moul (1992)
H115-001	Smelt Bay	Cortes Island	1991	11	11	10	5	11	Moul (1991)
H115-001	Smelt Bay	Cortes Island	1980		0				Forbes et al. (1985)
H115-001	Smelt Bay	Cortes Island	1979	22	22				Butler (1997)
H115-002	Hague Lake	Cortes Island	1997	0	0				Moul (1998a)
H115-002	Hague Lake	Cortes Island	1996	3	0				Moul (1998a)
H115-002	Hague Lake	Cortes Island	1993	7	7				Moul (1998a)
H115-003	Whaletown	Cortes Island	1998		0				Moul (1999a)
H115-003	Whaletown	Cortes Island	1997	3	0				Moul (1998a)
H115-003	Whaletown	Cortes Island	1996	3	0				Moul (1998a)
H115-003	Whaletown	Cortes Island	1993	4	4				Moul (1998a)
H115-003	Whaletown	Cortes Island	1988	6	5				G. Sirk (pers. comm.)
H115-004	Gowland Island	Quadra Island	1988	4	0				Breault (1988)
H115-005	Heriot Bay	Quadra Island	1999	5	5	5	0		Moul (2000)
H115-006	Hyacinthe Bay	Quadra Island	1989	5	5	5	0		Moul (2000)
H115-006	Hyacinthe Bay	Quadra Island	1988	3	3	3	3		Moul (2000)
H115-006	Hyacinthe Bay	Quadra Island	1980		0				Forbes et al. (1985)
H115-006	Hyacinthe Bay	Quadra Island	1979	8					Forbes et al. (1985)
H115-007	Yaculta Village	Quadra Island	1987	1	1				Breault (1988)
H115-008	Cape Mudge	Quadra Island	1988	20	0				Breault (1988)

Abbreviations used: CFB = Canadian Forces Base
MELP = B.C. Ministry of Environment, Lands and Parks

Appendix 2
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H202-001	Greenwood Island	Hope	1979	10	10				Butler (1997)
H202-001	Greenwood Island	Hope	1973	1	1				Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1999	322	322	140	134	231	Vennesland (2000)
									A. Eissinger (pers. comm.)
H204-001	Point Roberts	Point Roberts	1998	337	304	272	233	534	A. Eissinger (pers. comm.)
H204-001	Point Roberts	Point Roberts	1997	393	294	328		537	A. Eissinger (pers. comm.)
H204-001	Point Roberts	Point Roberts	1996	444	444				A. Eissinger (pers. comm.)
H204-001	Point Roberts	Point Roberts	1995	472	472				Butler (1997)
H204-001	Point Roberts	Point Roberts	1994	414	414				Butler (1997)
H204-001	Point Roberts	Point Roberts	1993	400	400				Butler (1997)
H204-001	Point Roberts	Point Roberts	1992	474	235	25	25	76	Gebauer (1995a)
H204-001	Point Roberts	Point Roberts	1991	387	387				Butler (1997)
H204-001	Point Roberts	Point Roberts	1990	300	300				Butler (1997)
H204-001	Point Roberts	Point Roberts	1989	253	253				Butler (1997)
H204-001	Point Roberts	Point Roberts	1988	335	335				Butler (1997)
H204-001	Point Roberts	Point Roberts	1987	253	253				Butler (1997)
H204-001	Point Roberts	Point Roberts	1986	220	220				Butler (1997)
H204-001	Point Roberts	Point Roberts	1981	220	220	50	50	122	Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1980	250	222	53	53	156	Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1979	247	236	33	33	96	Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1978	226	210	39	39	98	Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1977	216	183	39	39	109	Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1974	30	30				Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1973	30	30				Forbes et al. (1985)
H204-001	Point Roberts	Point Roberts	1970	1	1				Forbes et al. (1985)
H204-002	Nicomekl	Crescent Beach	1999	34	34	30	15	36	Vennesland (2000)
H204-002	Nicomekl	Crescent Beach	1998	37	37	37	36	93	Vennesland (2000)
H204-002	Nicomekl	Crescent Beach	1997	30	30	7	7	19	Moul (1998b)
H204-002	Nicomekl	Crescent Beach	1995	35	35				Butler (1997)
H204-002	Nicomekl	Crescent Beach	1994	30	30				Gebauer (1995a)
H204-002	Nicomekl	Crescent Beach	1993	36	36				Gebauer (1995a)
H204-002	Nicomekl	Crescent Beach	1992	36	36	34	32	108	Gebauer (1995a)
H204-002	Nicomekl	Crescent Beach	1990	40	40	37	37	81	Butler (1997)
H204-002	Nicomekl	Crescent Beach	1988	38	38	30	25	59	Butler (1997)
H204-002	Nicomekl	Crescent Beach	1987	55	55	55	29		Elliott et al. (1989)
H204-002	Nicomekl	Crescent Beach	1986	23	23	23	12	25	Elliott et al. (1989)
H204-003	Serpentine	Surrey	1999		0				Vennesland (2000)
H204-003	Serpentine	Surrey	1998	8	8	8	0		Vennesland (2000)
H204-003	Serpentine	Surrey	1997	13	10	10	9	22	Moul (1998b)

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Appendix 2 (*cont'd*)
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H204-003	Serpentine	Surrey	1994	5	5				Gebauer (1995a)
H204-004	South # 7 Road	Richmond	1997	0	0				Moul (1998b)
H204-004	South # 7 Road	Richmond	1992	12	12	6	0		Gebauer (1995a)
H204-004	South # 7 Road	Richmond	1991	12	12	12	0		Butler (1997)
H204-004	South # 7 Road	Richmond	1989	16	12				Gebauer (1995a)
H204-004	South # 7 Road	Richmond	1987	7	7				Butler (1997)
H204-004	South # 7 Road	Richmond	1984	1	1				Forbes et al. (1985)
H204-005	Cessna Way	Richmond	1997	2	0				Moul (1998b)
H204-005	Cessna Way	Richmond	1992	12	0				Gebauer (1995a)
H204-005	Cessna Way	Richmond	1981	4	4		3	7	Forbes et al. (1985)
H204-006	Derby Reach	Langley	1997	5	0				Moul (1998b)
H204-006	Derby Reach	Langley	1994	0	0				Gebauer (1995a)
H204-006	Derby Reach	Langley	1993	0	0				Gebauer (1995a)
H204-006	Derby Reach	Langley	1992	37	0				Gebauer (1995a)
H204-006	Derby Reach	Langley	1991	40	40	40	0		Gebauer (1995a)
H204-006	Derby Reach	Langley	1981	33	31	15	12	32	Butler (1997)
H204-006	Derby Reach	Langley	1980	38	30				Butler (1997)
H204-006	Derby Reach	Langley	1979	38	38		12	37	Butler (1997)
H204-006	Derby Reach	Langley	1978	31	31				Butler (1997)
H204-006	Derby Reach	Langley	1977	16	16				Butler (1997)
H204-006	Derby Reach	Langley	1976	20	20				Butler (1997)
H204-006	Derby Reach	Langley	1975	18	18				Butler (1997)
H204-006	Derby Reach	Langley	1974	7	17				Butler (1997)
H204-007	N Delta River Road	North Delta	1998		0				Vennesland (2000)
H204-007	N Delta River Road	North Delta	1997	0	0				Moul (1998b)
H204-007	N Delta River Road	North Delta	1994		0				Gebauer (1995a)
H204-007	N Delta River Road	North Delta	1993		0				Gebauer (1995a)
H204-007	N Delta River Road	North Delta	1992	6	6	6	0		Gebauer (1995a)
H204-008	Chilliwack City	Chilliwack	1998	0	0				Vennesland (2000)
H204-008	Chilliwack City	Chilliwack	1997	15	15	15	0		Moul (1998b)
H204-008	Chilliwack City	Chilliwack	1994	15	12				Gebauer (1995a)
H204-008	Chilliwack City	Chilliwack	1993	5	5				Gebauer (1995a)
H204-009	CFB Chilliwack	Chilliwack	1999	114	114	27	22	44	Vennesland (2000)
H204-009	CFB Chilliwack	Chilliwack	1998	83	83	83	82	184	Vennesland (2000)
H204-009	CFB Chilliwack	Chilliwack	1997	93	80	12	8	18	Moul (1998b)
H204-009	CFB Chilliwack	Chilliwack	1994	140	140				Gebauer (1995a)
H204-009	CFB Chilliwack	Chilliwack	1993	140	140				Gebauer (1995a)
H204-009	CFB Chilliwack	Chilliwack	1992	152	152	152	54	152	Gebauer (1995a)
H204-009	CFB Chilliwack	Chilliwack	1980	104	91		43	113	Forbes et al. (1985)

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Appendix 2 (*cont'd*)
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H204-009	CFB Chilliwack	Chilliwack	1979	110	109				Forbes et al. (1985)
H204-009	CFB Chilliwack	Chilliwack	1978	101	101				Forbes et al. (1985)
H204-009	CFB Chilliwack	Chilliwack	1977	96	88		34	89	Forbes et al. (1985)
H204-009	CFB Chilliwack	Chilliwack	1976	50	50				Forbes et al. (1985)
H204-010	Vedder Canal	Chilliwack	1999	3	3	3	0		Vennesland (2000)
H204-010	Vedder Canal	Chilliwack	1998	2	2	2	2	5	Vennesland (2000)
H204-010	Vedder Canal	Chilliwack	1997	3	3	3	3	10	Moul (1999b)
H204-011	Boundary Bay	Delta	1998		0				Moul (1999b)
H204-011	Boundary Bay	Delta	1997		0				Moul (1998b)
H204-011	Boundary Bay	Delta	1996	14	0				Butler (1997)
H204-012	Tilbury Island	Delta	1999	12	12	10	8	19	Vennesland (2000)
H204-012	Tilbury Island	Delta	1998	8	8	8	8	22	Vennesland (2000)
H204-013	White Rock	White Rock	1962	1	1				Forbes et al. (1985)
H204-014	Crescent Beach	South Surrey	1980	41	41		22	50	Forbes et al. (1985)
H204-014	Crescent Beach	South Surrey	1979	42	42		13	40	Forbes et al. (1985)
H204-014	Crescent Beach	South Surrey	1978	46	46		17	47	Forbes et al. (1985)
H204-014	Crescent Beach	South Surrey	1977	39	37		18	53	Forbes et al. (1985)
H204-014	Crescent Beach	South Surrey	1968	1	1				Forbes et al. (1985)
H204-014	Crescent Beach	South Surrey	1967	1	1				Forbes et al. (1985)
H204-015	Sea Island 2	Richmond	1992	12	12				Butler (1997)
H204-015	Sea Island 2	Richmond	1987	7	7				Butler (1997)
H204-016	Fort Langley	Langley	1963	12	12				Forbes et al. (1985)
H204-016	Fort Langley	Langley	1944	1	1				Forbes et al. (1985)
H204-017	Tsawwassen	Tsawwassen	1961	1	1				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1960		0				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1959	100	100				Forbes et al. (1985)
H204-017	Tsawwassen	Tsawwassen	1958	100	100				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1956	85	85				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1955	85	85				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1949	185	185				Forbes et al. (1985)
H204-017	Tsawwassen	Tsawwassen	1948	165	165				Forbes et al. (1985)
H204-018	Douglas Island	Port Coquitlam	1977	1	1				Forbes et al. (1985)
H204-018	Douglas Island	Port Coquitlam	1973	1	1				Forbes et al. (1985)
H204-019	Poplar Island	New Westminster	1974	10	10				Forbes et al. (1985)
H204-019	Poplar Island	New Westminster	1973	1	1				Forbes et al. (1985)
H204-020	McGillivray Slough	Sumas Mt.	1977	51	46				Forbes et al. (1985)
H204-020	McGillivray Slough	Sumas Mt.	1974	27					Forbes et al. (1985)
H204-020	McGillivray Slough	Sumas Mt.	1920	1	1				Forbes et al. (1985)
H204-021	McMillian Island	Fort Langley	1964	35	35				Forbes et al. (1985)

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Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H204-022	Mount Lehman	Abbotsford	1988	1	1				Forbes et al. (1985)
H204-022	Mount Lehman	Abbotsford	1970	10	10				Forbes et al. (1985)
H204-023	Sea Island 1	Richmond	1949	40	40				Forbes et al. (1985)
H204-023	Sea Island 1	Richmond	1945	40	40				Forbes et al. (1985)
H204-023	Sea Island 1	Richmond	1943	40	40				Forbes et al. (1985)
H204-023	Sea Island 1	Richmond	1941	40	40				Forbes et al. (1985)
H205-001	Paq Lake	Pender Harbour	1997	0	0				Moul (1998b)
H205-001	Paq Lake	Pender Harbour	1994	8	8				Gebauer (1995b)
H205-001	Paq Lake	Pender Harbour	1993	10	10	10	8	11	Gebauer (1995b)
H205-001	Paq Lake	Pender Harbour	1992	5	5	5	1	2	Moul (1992)
H205-002	Halfmoon Bay	Halfmoon Bay	1999	5	3	3	0		Vennesland (2000)
H205-002	Halfmoon Bay	Halfmoon Bay	1998	3	3				Moul (1999b)
H205-002	Halfmoon Bay	Halfmoon Bay	1997	7	0				Moul (1998b)
H205-002	Halfmoon Bay	Halfmoon Bay	1994	19	19				Gebauer (1995b)
H205-002	Halfmoon Bay	Halfmoon Bay	1993	16	14	14	12	20	Gebauer (1995b)
H205-003	Acorn Street	Sechelt	1999	5	5	5	0		Vennesland (2000)
H205-003	Acorn Street	Sechelt	1998	2	2	2	0		Moul (1999b)
H205-003	Acorn Street	Sechelt	1997	6	6	6	1		Moul (1998b)
H205-003	Acorn Street	Sechelt	1994	1	1				Gebauer (1995b)
H205-003	Acorn Street	Sechelt	1993	11	11	11	3	6	Gebauer (1995b)
H205-004	Stewart Road	Gibsons	1997		0				Moul (1998b)
H205-004	Stewart Road	Gibsons	1994	2	2	2	0		Butler (1997)
H205-004	Stewart Road	Gibsons	1993	4	4	4	0		Butler (1997))
H205-005	Storm Bay	Sechelt Inlet	1997		0				Moul (1998b)
H205-005	Storm Bay	Sechelt Inlet	1993	10	10				Gebauer (1995b)
H205-006	Sutton Islets	Egmont	1999		0				Vennesland (2000)
H205-006	Sutton Islets	Egmont	1998	5	5	5	0		Vennesland (2000)
H205-006	Sutton Islets	Egmont	1997	0	0				Moul (1998b)
H205-006	Sutton Islets	Egmont	1994	1	1				Gebauer (1995b)
H205-006	Sutton Islets	Egmont	1993	10	10				Gebauer (1995b)
H205-007	Earles Cove	Earles Cove	1999	1	1	1	1		M.B. Gebauer (unpublished)
H205-008	Town-site	Gibsons Landing	1977	10	10				Forbes et al. (1985)
H205-009	Twin Creeks	Gibsons Landing	1980	2	2	2	2	2	Forbes et al. (1985)
H205-009	Twin Creeks	Gibsons Landing	1979	1	1		0		Forbes et al. (1985)
H205-009	Twin Creeks	Gibsons Landing	1978	54	54		0		Forbes et al. (1985)
H205-010	Gunboat Bay	Pender Harbour	1981	30	0				Forbes et al. (1985)
H205-010	Gunboat Bay	Pender Harbour	1980	0	0				Forbes et al. (1985)
H205-010	Gunboat Bay	Pender Harbour	1979	94	44		18	54	Forbes et al. (1985)
H205-010	Gunboat Bay	Pender Harbour	1978	93	43		19	40	Forbes et al. (1985)

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Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H205-010	Gunboat Bay	Pender Harbour	1977	75	75				Forbes et al. (1985)
H205-010	Gunboat Bay	Pender Harbour	1963	75	75				Forbes et al. (1985)
H205-011	Tuwanek	Sechelt	1999	5	3	3	0		Vennesland (2000)
H207-001	Brackendale	Squamish	1993	5	0				Butler (1997)
H208-001	Pacific Spirit Park	Vancouver	1999	188	174	174	106	233	Vennesland (2000)
H208-001	Pacific Spirit Park	Vancouver	1998	190	190	190	70	102	Vennesland (2000)
H208-001	Pacific Spirit Park	Vancouver	1997	119	75	38	20	48	Moul (1998b)
H208-001	Pacific Spirit Park	Vancouver	1996	217	217				Butler (1997)
H208-001	Pacific Spirit Park	Vancouver	1994	169	169				Gebauer (1995a)
H208-001	Pacific Spirit Park	Vancouver	1993	162	162				Gebauer (1995a)
H208-001	Pacific Spirit Park	Vancouver	1992	142	142	49	39	100	Gebauer (1995a)
H208-001	Pacific Spirit Park	Vancouver	1990	157	140	20	17	48	J.E. Elliott (pers. comm.)
H208-001	Pacific Spirit Park	Vancouver	1989	141	141	12	10	22	J.E. Elliott (pers. comm.)
H208-001	Pacific Spirit Park	Vancouver	1988	158	158	17	14	36	Butler (1997) (pers. comm.)
H208-001	Pacific Spirit Park	Vancouver	1987	214	156	156	126	233	Butler (1997)
									Elliott et al. (1989)
H208-001	Pacific Spirit Park	Vancouver	1986	78	78	78	46	92	Elliott et al. (1989)
H208-001	Pacific Spirit Park	Vancouver	1981	150	125		42	81	Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1980	147	130		51	122	Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1979	130	130		22	64	Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1978	128	108		30	83	Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1977	92	82		23	50	Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1974	1	1				Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1973	1	1				Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1972	30	30				Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1971	75	75				Forbes et al. (1985)
H208-001	Pacific Spirit Park	Vancouver	1970	127	120				Forbes et al. (1985)
H208-002	Stanley Park Aquarium	Vancouver	1999	3	3	3	0		Vennesland (2000)
H208-002	Stanley Park Aquarium	Vancouver	1998	3	3		0		Vennesland (2000)
H208-002	Stanley Park Aquarium	Vancouver	1997	20	19	19	0		Moul (1998b)
H208-002	Stanley Park Aquarium	Vancouver	1995	19	19	19	19	49	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1994	17	16	16	16	38	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1993	30	30				Gebauer (1995a)
H208-002	Stanley Park Aquarium	Vancouver	1992	33	33	32	31	90	Gebauer (1995a)
H208-002	Stanley Park Aquarium	Vancouver	1991	19	19				Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1990	30	30	15		38	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1989	30	30	20		38	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1987	31	31	16		56	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1981	29	20		9	20	Forbes et al. (1985)

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Appendix 2 (*cont'd*)
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H208-002	Stanley Park Aquarium	Vancouver	1980	33	33		19	39	Forbes et al. (1985)
H208-002	Stanley Park Aquarium	Vancouver	1979	40	38	38	38	91	Forbes et al. (1985)
H208-002	Stanley Park Aquarium	Vancouver	1978	44	44		22	56	Forbes et al. (1985)
H208-002	Stanley Park Aquarium	Vancouver	1977	31	19		12	28	Forbes et al. (1985)
H208-003	Cliff Street	Burnaby	1999	50	50				Vennesland (2000)
H208-003	Cliff Street	Burnaby	1998	50	50	50	48	141	Vennesland (2000)
H208-003	Cliff Street	Burnaby	1997	20	20				Moul (1998b)
H208-003	Cliff Street	Burnaby	1994	20	20				Gebauer (1995a)
H208-003	Cliff Street	Burnaby	1993	20	20				Gebauer (1995a)
H208-003	Cliff Street	Burnaby	1992	20	20				Gebauer (1995a)
H208-004	Admiralty Point	Port Moody	1994	10	10				Gebauer (1995a)
H208-005	Mary Hill	Port Coquitlam	1999	107	107	17	17	38	Vennesland (2000)
H208-005	Mary Hill	Port Coquitlam	1998	108	108	45	35	84	Vennesland (2000)
H208-005	Mary Hill	Port Coquitlam	1997	62	62	62	0		Moul (1998b)
H208-005	Mary Hill	Port Coquitlam	1994	52	52				Gebauer (1995a)
H208-005	Mary Hill	Port Coquitlam	1993	22	22				Gebauer (1995a)
H208-005	Mary Hill	Port Coquitlam	1992	16	16	11	11	16	Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1997	0	0				Moul (1998b)
H208-006	McIvor Road	Maple Ridge	1994	43	43				Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1993	30	30				Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1992	10	10				Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1979	8	5		5	15	Butler (1997)
H208-006	McIvor Road	Maple Ridge	1978	10	8		6	13	Butler (1997)
H208-006	McIvor Road	Maple Ridge	1977	10	10		8	15	Butler (1997)
H208-007	North Alouette River	Pitt Meadows	1997	0	0				Moul (1998b)
H208-007	North Alouette River	Pitt Meadows	1994		0				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1993		0				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1992	65	0				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1991	70	70				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1974	10	10				Butler (1997)
H208-008	Rennie Road	Pitt Meadows	1997	0	0				Moul (1998b)
H208-008	Rennie Road	Pitt Meadows	1993	6	4	4	0		Gebauer (1995a)
H208-008	Rennie Road	Pitt Meadows	1992	6	0				Butler (1997)
H208-009	McCormick Marsh	Matsqui	1997	0	0				Moul (1998b)
H208-009	McCormick Marsh	Matsqui	1993	0	0				Gebauer (1995a)
H208-009	McCormick Marsh	Matsqui	1992	12	0				Gebauer (1995a)
H208-009	McCormick Marsh	Matsqui	1989	40	40				P. Whitehead (pers. comm.)
H208-010	Crescent Island	Matsqui	1997	0	0				Moul (1998b)
H208-010	Crescent Island	Matsqui	1992	0	0				Gebauer (1995a)

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Appendix 2 *(cont'd)*
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H208-010	Crescent Island	Matsqui	1991	6	0				Butler (1997)
H208-010	Crescent Island	Matsqui	1990	8	0	6	0		Gebauer (1995a)
H208-010	Crescent Island	Matsqui	1974	1	1				Forbes et al. (1985)
H208-010	Crescent Island	Matsqui	1963	1	1				Forbes et al. (1985)
H208-010	Crescent Island	Matsqui	1962	3	3				Forbes et al. (1985)
H208-010	Crescent Island	Matsqui	1960	0	0				Butler (1997)
H208-011	De Boville Slough 1	Coquitlam	1997	0	0				Moul (1998b)
H208-011	De Boville Slough 1	Coquitlam	1994	0	0				Gebauer (1995a)
H208-011	De Boville Slough 1	Coquitlam	1993	34	34	34	0		Butler (1997)
H208-011	De Boville Slough 1	Coquitlam	1992	70	70	59	0		Gebauer (1995a)
H208-012	De Boville Slough 2	Coquitlam	1997	0	0				Moul (1998b)
H208-012	De Boville Slough 2	Coquitlam	1994	34	0				Butler (1997)
H208-012	De Boville Slough 2	Coquitlam	1993	34	34	34	0		Gebauer (1995a)
H208-012	De Boville Slough 2	Coquitlam	1992	50	50	50	38	72	Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1997	0	0				Moul (1998b)
H208-013	Colony Farm	Port Coquitlam	1994	1	0				Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1993	1	1	1	0		Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1992	4	4	4	2	8	Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1978	162	162		43	99	Butler (1997)
H208-013	Colony Farm	Port Coquitlam	1977	169	169		42	97	Butler (1997)
H208-013	Colony Farm	Port Coquitlam	1973	59	48				Butler (1997)
H208-014	Clayburn	Matsqui	1997	0	0				Moul (1998b)
H208-014	Clayburn	Matsqui	1995		0				Gebauer (1995a)
H208-014	Clayburn	Matsqui	1994		0				Butler (1997)
H208-014	Clayburn	Matsqui	1993	7	2	2	0		Gebauer (1995a)
H208-015	Alouette River	Maple Ridge	1999	120	120	64	49	79	Vennesland (2000)
H208-015	Alouette River	Maple Ridge	1998	86	86	66	66	171	Vennesland (2000)
H208-015	Alouette River	Maple Ridge	1997	63	63				Moul (1998b)
H208-016	Mission - Silvermere	Mission	1999	45	39	36	27	51	Vennesland (2000)
H208-016	Mission - Silvermere	Mission	1998	60	60	60	56	119	Vennesland (2000)
H208-016	Mission - Silvermere	Mission	1997	10	10				Moul (1998b)
H208-017	Hatzic Lake	Mission	1999	67	67	56	47	112	Vennesland (2000)
H208-017	Hatzic Lake	Mission	1998	65	65	45	45	117	Vennesland (2000)
H208-018	Horseshoe Bay	West Vancouver	1999	2	2	2	2	8	Vennesland (2000)
H208-020	Rippington Road	Pitt Meadows	1981	8	6		4	10	Forbes et al. (1985)
H208-020	Rippington Road	Pitt Meadows	1980	6	4		4	13	Forbes et al. (1985)
H208-020	Rippington Road	Pitt Meadows	1979	1	1				Forbes et al. (1985)
H208-021	Port Coquitlam IR 2	Port Coquitlam	1980	26	26	26	26	55	Forbes et al. (1985)
H208-021	Port Coquitlam IR 2	Port Coquitlam	1979	34	31		17	30	Forbes et al. (1985)

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Appendix 2 (*cont'd*)
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H208-021	Port Coquitlam IR 2	Port Coquitlam	1978	162	162		43	99	Forbes et al. (1985)
H208-021	Port Coquitlam IR 2	Port Coquitlam	1977	169	169		42	98	Forbes et al. (1985)
H208-021	Port Coquitlam IR 2	Port Coquitlam	1973	59	48				Forbes et al. (1985)
H208-022	Widgeon Creek	Pitt Meadows	1979	2	2				Forbes et al. (1985)
H208-023	UBC - Marine Drive	UBC	1973	1	1				Forbes et al. (1985)
H208-023	UBC - Marine Drive	UBC	1972	30	30				Forbes et al. (1985)
H208-023	UBC - Marine Drive	UBC	1971	67	67	67	67	174	Forbes et al. (1985)
H208-023	UBC - Marine Drive	UBC	1970	130	130				Forbes et al. (1985)
H208-024	Lion's Bay	Lion's Bay	1980	4	4				Forbes et al. (1985)
H208-025	Alice Lake	Squamish	1993	1	1				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1980	13	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1979	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1978	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1977	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1975	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1974	10	10				Butler (1997)
H208-028	Ruskin	Maple Ridge	1964	35	35				Butler (1997)
H208-028	Ruskin	Maple Ridge	1963	30	30				Butler (1997)
H208-028	Ruskin	Maple Ridge	1925	1	1				Butler (1997)
H208-029	Burnaby Lake	Burnaby	1942	1	1				Forbes et al. (1985)
H208-029	Burnaby Lake	Burnaby	1933	1	1				Forbes et al. (1985)
H208-030	Burnaby Mountain	Burnaby	1996	20	20				Butler (1997)
H208-030	Burnaby Mountain	Burnaby	1992	20	20				Butler (1997)
H208-031	Nature Park	Port Coquitlam	1973		0				Forbes et al. (1985)
H208-031	Nature Park	Port Coquitlam	1971	76	68	68	68	190	Forbes et al. (1985)
H208-032	Dewdney 2	Maple Ridge	1971	0	0				Forbes et al. (1985)
H208-032	Dewdney 2	Maple Ridge	1970	30	30				Forbes et al. (1985)
H208-032	Dewdney 2	Maple Ridge	1963	20	20				Forbes et al. (1985)
H208-033	Dewdney 3	Maple Ridge	1974	0	0				Forbes et al. (1985)
H208-033	Dewdney 3	Maple Ridge	1973	9	9				Forbes et al. (1985)
H208-034	Dewdney 1	Maple Ridge	1974	0	0				Forbes et al. (1985)
H208-034	Dewdney 1	Maple Ridge	1973	9	9				Forbes et al. (1985)
H208-034	Dewdney 1	Maple Ridge	1972	11	11				Forbes et al. (1985)
H208-035	North Vancouver	N. Vancouver	1929	1	1				Forbes et al. (1985)
H208-035	North Vancouver	N. Vancouver	1923	18	18				Forbes et al. (1985)
H208-036	Crane Ponds	Pitt Meadows	1981	5	0				Butler (1997)
H208-036	Crane Ponds	Pitt Meadows	1980	1	0				Butler (1997)
H208-036	Crane Ponds	Pitt Meadows	1979	1	1	1	1	1	Butler (1997)
H208-037	Stanley Park - Beaver L	Vancouver	1977	31	19		12	28	Forbes et al. (1985)

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Appendix 2 (*cont'd*)
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H208-037	Stanley Park - Beaver L	Vancouver	1974	21	21				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1971	30	30				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1970	40	40				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1969	25	25				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1968	25	25				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1967	40	40				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1966	28	28				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1961	25	25				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1959	25	25				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1928	27	27				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1923	23	23				Forbes et al. (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1921	37	37				Forbes et al. (1985)
H208-038	Fraser Mills	Maillardville	1960	45	38				Forbes et al. (1985)
H212-001	Scuttle Bay	Powell River	1997	0	0				Moul (1998b)
H212-001	Scuttle Bay	Powell River	1994	20	20				Moul (1994)
H212-002	Gibsons Beach	Powell River	1999	0	0				Vennesland (2000)
H212-002	Gibsons Beach	Powell River	1997	0	0				Moul (1998b)
H212-002	Gibsons Beach	Powell River	1992	0	0				Moul (1992)
H212-002	Gibsons Beach	Powell River	1991	13	13	13	0		Moul (1991)
H212-002	Gibsons Beach	Powell River	1990	38	35	33	22	51	Breault (1990)
H212-003	Willingdon Beach	Powell River	1999	0	0				Vennesland (2000)
H212-003	Willingdon Beach	Powell River	1997	0	0				Moul (1998b)
H212-003	Willingdon Beach	Powell River	1994	6	5				Gebauer (1995b)
H212-003	Willingdon Beach	Powell River	1993	10	10	10	0		Gebauer (1995b)
H212-003	Willingdon Beach	Powell River	1980	29	19				Forbes et al. (1985)
H212-003	Willingdon Beach	Powell River	1978	6					Forbes et al. (1985)
H212-003	Willingdon Beach	Powell River	1974		14				Forbes et al. (1985)
H212-003	Willingdon Beach	Powell River	1973	30					Forbes et al. (1985)
H212-004	Hazelton Street	Powell River	1999	0	0				Vennesland (2000)
H212-004	Hazelton Street	Powell River	1997	0	0				Moul (1998b)
H212-004	Hazelton Street	Powell River	1994	8	7				Moul (1994)
H212-004	Hazelton Street	Powell River	1993	7	7	7	4	6	Moul (1993)
H212-005	Penticton Street	Powell River	1999	0	0				Vennesland (2000)
H212-005	Penticton Street	Powell River	1997		0				Moul (1998b)
H212-005	Penticton Street	Powell River	1992		0				Moul (1992)
H212-005	Penticton Street	Powell River	1991		0				Moul (1991)
H212-005	Penticton Street	Powell River	1989	4	4	4	0		Breault (1989)
H212-005	Penticton Street	Powell River	1988	42	42	42	0		Breault (1988)
H212-006	Myrtle Beach	Powell River	1999	0	0				Vennesland (2000)

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Appendix 2 (*cont'd*)
Great Blue Heron colony records for the Lower Fraser Valley, Sunshine Coast, and Powell River areas, British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H212-006	Myrtle Beach	Powell River	1997	0	0				Moul (1998b)
H212-006	Myrtle Beach	Powell River	1994	2	2				Gebauer (1995b)
H212-006	Myrtle Beach	Powell River	1993	6	6				Gebauer (1995a)
H212-007	Okeover Inlet	Powell River	1999	0	0				Vennesland (2000)
H212-007	Okeover Inlet	Powell River	1997	0	0				Moul (1998b)
H216-001	Snug Cove A	Bowen Island	1999	1	1	1	0		Vennesland (2000)
H216-002	Snug Cove B	Bowen Island	1999	2	2	2	2	4	Vennesland (2000)
H216-003	Anvil Island	Anvil Island	1980	8	0				Forbes et al. (1985)
H216-003	Anvil Island	Anvil Island	1974	1	1				Forbes et al. (1985)
H216-003	Anvil Island	Anvil Island	1972	1	1				Forbes et al. (1985)
H216-004	Nelson Island	Nelson Island	1980	1	0				Forbes et al. (1985)
H216-004	Nelson Island	Nelson Island	1977	1	0				Butler (1997)
H218-001	Cheam Lake	Agassiz	1999	15	15				Vennesland (2000)
H218-001	Cheam Lake	Agassiz	1997	0	0				Moul (1998b)
H218-001	Cheam Lake	Agassiz	1994	10	10				Gebauer (1995a)
H218-001	Cheam Lake	Agassiz	1993	15	15				Gebauer (1995a)
H218-001	Cheam Lake	Agassiz	1992	13	13				Gebauer (1995a)
H219-001	Harrison River	Harrison Mills	1999	0	0				Vennesland (2000)
H219-001	Harrison River	Harrison Mills	1998	20	15	20	0		Vennesland (2000)
H219-001	Harrison River	Harrison Mills	1997	27	27	27	0		Moul (1998b)
H219-001	Harrison River	Harrison Mills	1994	40	40				Gebauer (1995a)
H219-001	Harrison River	Harrison Mills	1993	40	40				Gebauer (1995a)
H219-001	Harrison River	Harrison Mills	1992	63	63	63	19	36	Gebauer (1995a)
H219-002	Chehalis River	Harrison Mills	1979	84	0				Forbes et al. (1985)
H219-002	Chehalis River	Harrison Mills	1960	1	1				Forbes et al. (1985)
H219-002	Chehalis River	Harrison Mills	1959	1	1				Forbes et al. (1985)
H219-002	Chehalis River	Harrison Mills	1958	1	1				Forbes et al. (1985)
H219-002	Chehalis River	Harrison Mills	1957	1	1				Forbes et al. (1985)

Abbreviations used: CFB = Canadian Forces Base
IR = Indian Reserve
UBC = University of British Columbia

Appendix 3
Great Blue Heron colony records for the North Coast and Queen Charlotte Islands, British Columbia, 1920–1997

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H612-001	Kunghit Island	South Moresby	1946	1	1				Forbes et al. (1985)
H613-001	Massett	Graham Island	1920	1	1				Forbes et al. (1985)
H613-002	Massett Inlet	Graham Island	1927	1	1				Forbes et al. (1985)
H613-003	Yakoun River Estuary	Port Clements	1996	2	2				A. Cober (pers. comm.)
H613-004	Chinkundl Creek	Skidegate	1997	2	2				A. Hetherington (pers. comm.)
H613-005	Demon Creek	Graham Island	1997	3	3				A. Hetherington (pers. comm.)

Appendix 4
Great Blue Heron colony records for interior regions of British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H318-001	Grant Ranch	Lower Nicola	1999	7					K. Shewchuk (pers. comm.)
H320-001	Nicola River	Merrit	1982	1	1				Forbes et al. (1985)
H326-001	Chum Lake	S. Thompson R.	1980	3	3				Forbes et al. (1985)
H326-001	Chum Lake	S. Thompson R.	1973	1	1				Forbes et al. (1985)
H326-002	Chum Lake - east	S. Thompson R.	1980	1	1				Forbes et al. (1985)
H338-001	Darfield	N. Thompson R.	1980	11	9				Forbes et al. (1985)
H404-001	Moyie Lake	Cranbrook	1983	15	11				Forbes et al. (1985)
H404-001	Moyie Lake	Cranbrook	1982	11	11				Forbes et al. (1985)
H404-001	Moyie Lake	Cranbrook	1981	11					Forbes et al. (1985)
H406-001	Duck Lake	Creston	1983	66	57				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1982	54	54				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1981	70	55				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1980	85	63				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1977	93	93				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1975	122	122				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1973	114	114				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1972	95	95				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1971	90	90				Forbes et al. (1985)
H406-001	Duck Lake	Creston	1968	80					Forbes et al. (1985)
H406-001	Duck Lake	Creston	1968	80	80		23	28	Forbes et al. (1985)
H406-001	Duck Lake	Creston	1966	77					Forbes et al. (1985)
H406-001	Duck Lake	Creston	1948	40					Forbes et al. (1985)
H406-001	Duck Lake	Creston	1947	40					Forbes et al. (1985)
H406-002	Goat River	Creston	1984	33	33				Forbes et al. (1985)
H406-002	Goat River	Creston	1982	30	25				Forbes et al. (1985)
H406-002	Goat River	Creston	1981	23					Forbes et al. (1985)
H406-002	Goat River	Creston	1980	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1979	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1978	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1977	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1976	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1975	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1974	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1973	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1972	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1971	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1970	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1969	15	15				Forbes et al. (1985)
H406-002	Goat River	Creston	1968	15	15				Forbes et al. (1985)

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Appendix 4 (*cont'd*)
Great Blue Heron colony records for interior regions of British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H406-002	Goat River	Creston	1967	15	15				Forbes et al. (1985)
H406-003	Saugum Lake	Kootenay	1999	12	12				G. Tipper (pers. comm.)
H408-001	Salmo River	Salmo	1983	4	4				Forbes et al. (1985)
H409-001	Nancy Green Lake	Castlegar	1999	1	1				T. Antifeau (pers. comm.)
H416-001	Slocan City	Slocan	1980	5					Forbes et al. (1985)
H416-001	Slocan City	Slocan	1979	1	1				Forbes et al. (1985)
H416-001	Slocan City	Slocan	1978	1	1				Forbes et al. (1985)
H416-001	Slocan City	Slocan	1977	1	1				Forbes et al. (1985)
H416-001	Slocan City	Slocan	1976	1	1				Forbes et al. (1985)
H416-001	Slocan City	Slocan	1975	1	1				Forbes et al. (1985)
H416-002	Slocan Pool	Slocan	1980	7	5				Forbes et al. (1985)
H416-002	Slocan Pool	Slocan	1979	1	1				Forbes et al. (1985)
H416-002	Slocan Pool	Slocan	1978	1	1				Forbes et al. (1985)
H416-002	Slocan Pool	Slocan	1977	1	1				Forbes et al. (1985)
H420-001	Fort Steele	Kootenay River	1977	10					Forbes et al. (1985)
H421-001	Saint Mary's River	Fort Steele	1982	30	25				Forbes et al. (1985)
H421-001	Saint Mary's River	Fort Steele	1980	14	14				Forbes et al. (1985)
H421-001	Saint Mary's River	Fort Steele	1976	1	1				Forbes et al. (1985)
H422-001	Colvalli	Kootenay River	1970	13					Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1982	45	35				Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1981	40	35				Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1980	46					Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1979	33					Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1973	10					Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1963	25					Forbes et al. (1985)
H425-001	Fairmont	Columbia Lake	1941	2	2				Forbes et al. (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1981		0				Forbes et al. (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1980	10	5				Forbes et al. (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1979	8					Forbes et al. (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1978	10	0				Forbes et al. (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1976	30					Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1981		0				Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1980		0				Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1979	6					Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1976	6	6				Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1973	12					Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1967	25	25				Forbes et al. (1985)
H426-002	Windermere Lake	Windermere	1963	25					Mark (1976)
H430-001	Duncan-Lardeau	Kootenay Lake	1999	20					B. Herbison (pers. comm.)

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Appendix 4 (*cont'd*)
Great Blue Heron colony records for interior regions of British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H433-001	Upper Arrow Lake	Revelstoke	1982	12	12				Forbes et al. (1985)
H433-001	Upper Arrow Lake	Revelstoke	1981	17					Forbes et al. (1985)
H433-001	Upper Arrow Lake	Revelstoke	1978	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1982	4	4				Forbes et al. (1985)
H434-001	Golden	Golden	1980	15	15				Forbes et al. (1985)
H434-001	Golden	Golden	1969	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1968	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1967	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1966	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1965	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1964	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1963	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1962	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1961	1	1				Forbes et al. (1985)
H434-001	Golden	Golden	1960	1	1				Forbes et al. (1985)
H434-002	Parsons	Columbia River	1982	75	60		14	35	Forbes et al. (1985)
H434-002	Parsons	Columbia River	1981	65					Forbes et al. (1985)
H434-002	Parsons	Columbia River	1980	10	10				Forbes et al. (1985)
H434-002	Parsons	Columbia River	1968	1	1				Forbes et al. (1985)
H435-001	Brisco - north	Columbia River	1982	54	40		18	47	Forbes et al. (1985)
H435-001	Brisco - north	Columbia River	1981	34					Forbes et al. (1985)
H435-001	Brisco - north	Columbia River	1980	40					Forbes et al. (1985)
H435-001	Brisco - north	Columbia River	1979	28					Forbes et al. (1985)
H435-001	Brisco - north	Columbia River	1978	49					Forbes et al. (1985)
H435-001	Brisco - north	Columbia River	1974	51					Forbes et al. (1985)
H435-002	Brisco - south	Columbia River	1981		0				Forbes et al. (1985)
H435-002	Brisco - south	Columbia River	1980		0				Forbes et al. (1985)
H435-002	Brisco - south	Columbia River	1979	1	1				Forbes et al. (1985)
H435-002	Brisco - south	Columbia River	1978	15					Forbes et al. (1985)
H501-001	Little Horse Lake	100 Mile House	1999	30	30				R. Packham (pers. comm.)
H501-001	Little Horse Lake	100 Mile House	1998	30	30				R. Packham (pers. comm.)
H501-001	Little Horse Lake	100 Mile House	1997	30	30				R. Packham (pers. comm.)
H501-001	Little Horse Lake	100 Mile House	1996	30	30				R. Packham (pers. comm.)
H501-002	Muddy Lake	100 Mile House	1999		0				J. Steciw (pers. comm.)
H501-002	Muddy Lake	100 Mile House	1998	30	30				R. Packham (pers. comm.)
H501-002	Muddy Lake	100 Mile House	1997	30	30				R. Packham (pers. comm.)
H501-002	Muddy Lake	100 Mile House	1996	30	30				J. Steciw (pers. comm.)
H501-002	Muddy Lake	100 Mile House	1995	25	25				J. Steciw (pers. comm.)
H502-001	Fox Mt. Beacon	Williams Lake	1998	1	1				J. Steciw (pers. comm.)

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Appendix 4 (*cont'd*)
Great Blue Heron colony records for interior regions of British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H502-001	Fox Mt. Beacon	Williams Lake	1994	1	1		1	4	J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1999	4	4				J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1998	4	4				J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1997		0				J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1996		0				J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1995	1	1				J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1994	1	1				J. Steciw (pers. comm.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1993	1	1				J. Steciw (pers. comm.)
H502-003	Exeter Lake	100 Mile House	1999		0				J. Steciw (pers. comm.)
H502-003	Exeter Lake	100 Mile House	1998	30	30				J. Steciw (pers. comm.)
H502-003	Exeter Lake	100 Mile House	1997	30	30				J. Steciw (pers. comm.)
H502-003	Exeter Lake	100 Mile House	1996	30	30				J. Steciw (pers. comm.)
H502-004	Hawks Creek	Williams Lake	1999	0	0				J. Steciw (pers. comm.)
H502-004	Hawks Creek	Williams Lake	1998	7	7				J. Steciw (pers. comm.)
H502-004	Hawks Creek	Williams Lake	1997	7	7				J. Steciw (pers. comm.)
H502-004	Hawks Creek	Williams Lake	1996	1	1				J. Steciw (pers. comm.)
H502-004	Hawks Creek	Williams Lake	1990	4					J. Steciw (pers. comm.)
H502-005	Big Lake FSR	Williams Lake	1999	0	0				J. Steciw (pers. comm.)
H502-005	Big Lake FSR	Williams Lake	1998	12	12				J. Steciw (pers. comm.)
H502-005	Big Lake FSR	Williams Lake	1997	1	1				J. Steciw (pers. comm.)
H502-006	Chimney Lake	Williams Lake	1999	3	3				J. Steciw (pers. comm.)
H801-001	Vaseux Lake	Vaseux Lake	1983	5					Forbes et al. (1985)
H801-002	Hatfield's Island	Vaseux Lake	1988	1	1				O. Dyer (pers. comm.)
H801-002	Hatfield's Island	Vaseux Lake	1986	2	1				Cannings et al. (1987)
H801-002	Hatfield's Island	Vaseux Lake	1985	1	1				Cannings et al. (1987)
H808-001	Chain Lakes	Summerland	1972	1	1				Cannings et al. (1987)
H809-001	Island Road	Oliver	1992	3					O. Dyer (pers. comm.)
H810-001	Kelowna Airport	Kelowna	1999	6	6				L. Gyug (pers. comm.)
H810-002	Mission Creek	Kelowna	1999	5					T. Ether (pers. comm.)
H810-002	Mission Creek	Kelowna	1986	3	3				Cannings et al. (1987)
H810-002	Mission Creek	Kelowna	1985	3	3				Cannings et al. (1987)
H810-002	Mission Creek	Kelowna	1984	3	3				Cannings et al. (1987)
H810-002	Mission Creek	Kelowna	1983	3	3				Cannings et al. (1987)
H810-002	Mission Creek	Kelowna	1982	3	3				Cannings et al. (1987)
H810-002	Mission Creek	Kelowna	1981	3	3				Cannings et al. (1987)
H814-001	Jewel Lake	Greenwood	1992	3					O. Dyer (pers. comm.)
H822-001	Swan Lake	Vernon	1981	1	1				Forbes et al. (1985)
H822-002	Coldstream Creek	Vernon	1986	1	1				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1999	35	35				C. Siddle (pers. comm.)

Continued on next page

Appendix 4 (*cont'd*)
Great Blue Heron colony records for interior regions of British Columbia, 1920–1999

Colony ID code	Colony name	Locality	Year	Total nests	Active nests	Sample size	Successful nests	Number of chicks	Source
H822-003	Vernon city	Vernon	1998	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1997	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1996	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1995	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1994	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1993	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1992	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1991	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1990	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1989	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1988	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1987	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1986	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1985	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1984	7	7				Cannings et al. (1987)
H822-003	Vernon city	Vernon	1983	7	7				Cannings et al. (1987)
H823-001	Duteau Creek	Vernon	1983	6	6				Cannings et al. (1987)
H826-001	Gardom Lake	Armstrong	1946	2					Forbes et al. (1985)
H826-001	Gardom Lake	Armstrong	1945	2					Forbes et al. (1985)
H826-002	Shuswap River	Enderby	1994	20					O. Dyer (pers. comm.)
H826-002	Shuswap River	Enderby	1980	20					Forbes et al. (1985)
H826-002	Shuswap River	Enderby	1979	7					Forbes et al. (1985)
H826-002	Shuswap River	Enderby	1978	7					Forbes et al. (1985)
H826-003	Otter Lake	Armstrong	1980	26	23				Forbes et al. (1985)
H826-003	Otter Lake	Armstrong	1979	20					Forbes et al. (1985)
H826-003	Otter Lake	Armstrong	1977	25					Forbes et al. (1985)
H826-003	Otter Lake	Armstrong	1972	25	25				Cannings et al. (1987)
H826-003	Otter Lake	Armstrong	1963	24					Forbes et al. (1985)
H826-003	Otter Lake	Armstrong	1962	12					Forbes et al. (1985)

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Normalisation et interprétation des données de nidification des Grands Hérons en Colombie-Britannique

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Résumé

Des données historiques sur le nombre de nids et les résultats de nidification de 242 colonies de Grands Hérons en Colombie-Britannique de 1920 à 1999 ont été recueillies. Les méthodes de collecte de données ont varié au fil des ans. Nous avons conçu et appliqué une méthodologie type de collecte et d'interprétation de données de nidification pour que les utilisateurs disposent d'un ensemble cohérent de données.

Introduction

La qualité des données des relevés indiquant le nombre de Grands Hérons *Ardea herodias* nicheurs dans des régions géographiques étendues est souvent inégale, les données étant ainsi difficiles à interpréter (Dunn *et al.*, 1985). Des techniques ont été mises au point qui permettent de tenir compte des préjugés et des lacunes dans les données quant à l'estimation du nombre de Hérons nicheurs dans une région (Dunn *et al.*, 1985). Il est nécessaire, dans une première étape, de traiter toutes les données d'une manière uniforme. Notre but est de décrire les méthodes de collecte de données et d'appliquer un protocole aux données historiques afin de créer un ensemble de données normalisées pour des analyses futures.

La sous-espèce des Grands Hérons (*Ardea herodias fannini*), qui habite le littoral de la Colombie-Britannique, a été désignée « vulnérable » en 1997 par le Comité sur la situation des espèces en péril au Canada. Il est devenu essentiel d'estimer les tendances démographiques avec précision afin de pouvoir, par la suite, mesurer le succès des initiatives de rétablissement (Butler et Baudin, 2000; Gebauer et Moul, 2000). Les documents indiquant le nombre de nids et les résultats de la reproduction du Grand Héron vivant en colonies en Colombie-Britannique remontent à 1920. Ces documents varient de rapports anecdotiques à des données systématiquement recueillies dans le cadre de projets de recherche. Avec le temps, ceux-ci ont été compilés pour diverses études et ont été présentés dans des revues ainsi que des rapports gouvernementaux (par ex. Forbes *et al.*, 1985; Elliott *et al.*, 1989; Butler *et al.*, 1995; Butler, 1997). L'interprétation des données a été laissée à l'utilisateur. Ajoutons que les variations dans les réussites de nidification s'expliquent, en grande partie, par des tentatives infructueuses de nidification (Vennesland, 2000), lesquelles n'ont pas fait l'objet d'une estimation dans les premiers dénombrements. Le présent document a pour but de décrire un protocole de collecte et d'interprétation de données.

Méthodes

Méthodologie de collecte de données sur le terrain

Dès 1988, Breault (1988, 1989, 1990), suivi de Moul (1991, 1992, 1993, 1994, 1995), a établi une méthodologie pour la mesure de la productivité et des réussites de nidification des Hérons. Ces derniers retournent à leur colonie à la fin de janvier et en février. Il leur faut environ 14 semaines pour effectuer leur cycle de reproduction : la parade nuptiale dure environ deux semaines, l'incubation et la ponte, quatre semaines, et l'élevage des oisillons, huit semaines. En saison de nidification, au moins six visites ont été faites dans chaque colonie active. La première avait lieu de la fin de mars à la mi-mai en vue de confirmer la présence de Hérons nicheurs. Dans la région méridionale de l'île de Vancouver, les colonies se formaient vers la fin de mars tandis que dans la région septentrionale du détroit de Georgia, elles se formaient aussi tard que la fin de mai. La deuxième visite se faisait entre les derniers jours d'avril et les premiers de juin pour effectuer une estimation des dates d'éclosion. La période d'incubation et d'éclosion étant la plus critique quant à la perturbation des Hérons (Vos *et al.*, 1985; Rodgers et Smith, 1995), on a eu soin, en abordant une colonie, de ne pas déranger les hérons dans leurs nids. On pouvait entendre les cris des héronneaux à une distance approximative de 25 mètres des colonies. De plus, l'observation de hérons présentant des bois à leur compagne près de la date prévue d'éclosion était considérée comme un signe annonciateur de l'éclosion des oisillons (Butler, 1997). Les hérons rejettent des nids les coquilles des œufs éclos au fur et à mesure que les oeufs éclosent. Aussi relevait-on au moment de l'éclosion des débris de coquilles sous les nids dans quelques colonies habituées à la présence humaine à cet endroit.

Après avoir estimé la date la plus rapprochée d'éclosion, on calculait la date la plus rapprochée d'envol (huit semaines plus tard). On prévoyait trois visites aux colonies à des fins de dénombrement des héronneaux lorsque ceux-ci auraient

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Environment Canada — Canadian Wildlife Service

Tableau 1
Champs textuels et numériques pour les données historiques de nidification du Grand Héron

Champs	Description
CODE D'IDENTIFICATION DE LA COLONIE	Code unique d'identification d'une colonie.
NOM DE LA COLONIE	Désignation géographique ou cadastrale près du site.
LOCALITÉ	Nom de la ville ou de la municipalité la plus proche.
TOTAL DES NIDS	Nombre total des nids dénombrés, ce qui peut comprendre des vieux nids inoccupés.
NIDS ACTIFS	Nombre total ou estimatif des nids utilisés au cours d'une année quelconque.
TAILLE DE L'ÉCHANTILLON	Nombre de nids actifs qui ont servi à l'estimation de la productivité et des réussites de nidification.
NOMBRE DE NIDS PRODUCTIFS	Nombre de nids d'où s'est envolé au moins un héronneau.
NOMBRE DE HÉRONNEAUX	Nombre de héronneaux s'étant envolés des nids échantillonnés.
SOURCE	Document de référence, publié ou inédit, servant de source de données.

cinq, sept et neuf semaines. Il devait y avoir des visites supplémentaires pour tenir compte des couples en nidification tardive. Une dernière visite se faisait à l'automne, habituellement après la chute des feuilles, vers la fin de novembre, dans le but de dénombrer les nids.

Protocole appliqué aux données historiques

Les données de nidification du Grand Héron ont été tirées d'ouvrages et d'articles de revues (Cannings *et al.*, 1987; Elliott *et al.*, 1989; Butler *et al.*, 1995; Butler, 1997), de rapports inédits (Forbes *et al.*, 1985; Breault, 1988, 1989, 1990; Moul, 1991, 1992, 1993, 1994, 1995, 1998a, 1998b, 1999a, 1999b, 2000a, 2000b; Gebauer, 1995a, 1995b) et de récents relevés non publiés recueillis par les auteurs. Celles-ci ont été agencées en champs à valeur numérique fixe de sorte qu'elles se prêtent bien à des applications informatiques de cartographie et de système d'information géographique SIG (tableau 1). Ces données sont également disponibles en format SIG auprès du BC Ministry of Environment, Lands and Parks (Nanaimo, Colombie-Britannique) ou du bureau du Service canadien de la faune de Delta, en Colombie-Britannique.

Tous les relevés de colonie ont été attribués un code alphanumérique, soit la lettre H pour Grand Héron, que suivent des chiffres indiquant la région de gestion de la faune et le secteur de gestion du Ministry of Environment, Lands and Parks de la Colombie-Britannique, ainsi qu'un numéro de colonie à trois chiffres. Une colonie à Stanley Park a ainsi reçu le code H208-002 : H pour héron, 2 pour la région de gestion de la faune n° 2 (c.-à-d. les basses terres du Fraser), 08 pour le secteur de gestion n° 8 (c.-à-d. au nord du fleuve Fraser et à l'ouest de Mission) et -002 pour la colonie n° 2. Tous les noms de colonies qui comportaient auparavant un nom de personne ou de société ont été changés en faveur de noms de rue ou de caractéristiques topographiques près du site en question afin d'assurer une confidentialité aux propriétaires fonciers.

Les données étaient présentées sous forme, soit de résumés de colonie, soit d'observations de nids individuels. Le comptage (voir la procédure B ci-après) des relevés individuels a été effectué à des fins de comparaison avec les autres sites et pour fournir des données permettant de faire un résumé annuel.

A) Enregistrements des colonies

Pour établir les résumés de productivité des colonies, la procédure, les hypothèses et les choix implicites qui suivent ont été utilisés :

1) Si aucun nid n'était signalé, mais que la colonie était considérée comme active, les valeurs par défaut étaient TOTAL DES NIDS = 1 et NIDS ACTIFS = 1.
2) Si aucun nid n'était signalé, mais que la colonie était considérée comme inactive, les valeurs par défaut étaient TOTAL DES NIDS = 1 et NIDS ACTIFS = 0.
3) Si la colonie était considérée comme active et que seul le nombre total des nids était indiqué, la valeur par défaut des NIDS ACTIFS = TOTAL DES NIDS (voir la méthode de calcul d'un facteur de correction dans Dunn *et al.*, 1985).
4) Si la colonie était considérée comme active et que seul le nombre de nids actifs était indiqué, la valeur par défaut était TOTAL DES NIDS = NIDS ACTIFS.
5) TOTAL DES NIDS doit être supérieur ou égal à NIDS ACTIFS.
6) TAILLE D'ÉCHANTILLON ne peut être supérieur à NIDS ACTIFS.
7) NIDS PRODUCTIFS ne peut être supérieur à TAILLE D'ÉCHANTILLON.
8) Si la colonie était considérée comme productive, mais que le nombre de nids productifs n'était pas indiqué, la valeur par défaut des NIDS PRODUCTIFS = 1.
9) Si un intervalle d'années était indiqué, toutes les années de l'intervalle étaient utilisées.
10) Si un intervalle de nombres de nids était indiqué (TOTAL DES NIDS ou NIDS ACTIFS), le point milieu ou le nombre entier inférieur (s'il y avait un nombre décimal) était utilisé.

11) Si une colonie était considérée comme active, et que le nombre de nids n'était pas indiqué, le nombre de nids considérés comme actifs dans l'année la plus rapprochée était utilisé. Si cette année était à mi-chemin entre deux années où les nombres connus de nids étaient différents, on utilisait le nombre inférieur.

12) Si un intervalle d'années était indiqué, la colonie était considérée comme active et aucun nombre de nids n'était déclaré pour ces années. La taille de la colonie était toutefois indiquée dans les cinq années de l'intervalle et ce chiffre, ou le moindre de deux chiffres, était utilisé pour le TOTAL DES NIDS et/ou les NIDS ACTIFS.

13) Si les données historiques indiquaient un rapport calculé de héronneaux par nid actif et une TAILLE D'ÉCHANTILLON, le NOMBRE DE HÉRONNEAUX (dans l'échantillon) était rétrocalculé au nombre entier le plus proche.

14) Si le nombre de héronneaux par nid productif était indiqué, on présumait que seuls les nids productifs étaient inscrits, et la zone TAILLE D'ÉCHANTILLON était laissée en blanc. Si possible, on rétrocalculait le NOMBRE DE HÉRONNEAUX au nombre entier le plus proche en utilisant le nombre de NIDS PRODUCTIFS.

15) Dans l'inventaire des sources, les rapports étaient cités de préférence aux mentions d'origine ou aux communications personnelles.

B) Enregistrements des nids

Pour les données sur les nids individuels, la procédure, les hypothèses et les choix implicites qui suivent ont été utilisés :

1) On relevait un nid comme NID ACTIF durant la saison de nidification lorsque des oiseaux y étaient présents et/ou qu'on observait des fèces sur le feuillage ou le sol sous le nid. Après la saison de nidification, lorsque les feuilles étaient tombées des arbres contenant des nids, on relevait un nid comme ayant été actif au cours de la saison précédente s'il paraissait « bien formé » et « en bon état » comparativement aux nids manifestement vieux et inoccupés. On considérait tout enregistrement indiquant qu'un nid avait été actif un certain temps durant une saison de nidification comme enregistrement de NID ACTIF.

2) Dans les données sur les nids individuels, la TAILLE D'ÉCHANTILLON se définissait comme étant la somme des NIDS ACTIFS choisis pour calculer le résumé de la productivité de la colonie. Les nids ont été échantillonnés selon la facilité de leur observation. L'ensemble d'échantillons comportait aussi des nids moins facilement observés où des héronneaux avaient été observés à l'occasion de deux visites ou plus, si au moins une de ces observations avait eu lieu dans les deux semaines précédant la date estimative d'envol.

3) On relevait un nid comme NID PRODUCTIF si un ou plusieurs héronneaux y était observé à l'occasion de deux des visites aux colonies (aux semaines cinq, sept ou neuf).

4) Le NOMBRE DE HÉRONNEAUX ayant pris leur envol d'un nid individuel était déterminé par le nombre le plus élevé de héronneaux dénombrés à l'occasion des visites aux colonies durant les semaines cinq, sept et neuf.

Résultats et examen

Neuf cent huit relevés faisant état de 242 colonies de Grands Hérons établies de 1920 à 1999 ont été catalogués. L'existence de 103 sites de colonie a été signalée pour l'île de Vancouver (annexe 1), de 86 pour les basses terres du Fraser, la Sunshine Coast et la rivière Powell (annexe 2), de 6 pour la côte Nord et les îles de la Reine-Charlotte (annexe 3) et de 47 pour l'intérieur de la Colombie-Britannique (annexe 4). Les vastes efforts de recherche des dernières années dans des régions, comme l'île de Vancouver et les basses terres du Fraser, sont susceptibles de se rapprocher davantage des nombres réels que ceux des îles de la Reine-Charlotte, de la côte Nord et des régions intérieures, où les efforts ont été moindres.

Notre méthodologie peut être entachée de plusieurs erreurs. La valeur par défaut TOTAL DES NIDS = NIDS ACTIFS dans les cas où des dénombrements n'ont pas été effectués a sans doute entraîné une surestimation ou une sous-estimation des nombres réels. La valeur par défaut de « 1 » pour TOTAL DES NIDS, NIDS ACTIFS ou NIDS PRODUCTIFS a probablement créé une sous-estimation du nombre réel de nids dans la plupart des cas. La valeur par défaut de « 1 » a été utilisée à titre « d'indicateur » pour les lacunes ou les irrégularités dans les données. En outre, un grand nombre de relevés de colonie ne représente qu'une seule visite, accroissant ainsi les risques de négliger des nids qui n'ont été que brièvement occupés avant d'être abandonnés. Il s'ensuivrait une sous-estimation du nombre de nids établis et productifs de la colonie. On pourrait appliquer à ces données une méthode semblable à celle qu'ont employée Dunn *et al.* (1985) pour calculer un facteur de correction de l'estimation du nombre de nids actifs. Notre but ici est plutôt d'archiver des données brutes que d'estimer le nombre de Hérons nicheurs.

Les méthodes de dénombrement utilisées depuis 1988 sont plus uniformes que celles des années antérieures et permettent une comparaison par région et, dans certains cas, par colonie. Les relevés effectués avant 1988 offrent de l'intérêt comme repères historiques, et leurs données peuvent généralement se comparer, du moins dans certaines limites (pour le nombre de héronneaux par nid productif, par exemple), à celles des relevés plus récents. L'île de Vancouver et les basses terres du Fraser sont des régions relativement étendues ayant de nombreux sites où les Hérons peuvent nicher, et on peut s'attendre à ce que certaines colonies aient été négligées. En revanche, la Sunshine Coast est une région relativement petite où les plages, où se fait la quête de nourriture des Hérons, sont très accessibles et où de nombreuses routes donnent accès aux sites éventuels de nidification sur une distance d'environ 2 km du rivage. Vu les efforts de

recherche déployés ces 20 dernières années, il est moins probable que des colonies aient été négligées. Nous recommandons aux futurs chercheurs de suivre le protocole que nous décrivons dans ce cahier à des fins d'uniformisation des méthodes de collecte de données et de l'interprétation des ensembles de données.

Remerciements

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Annexe 1

Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H101-001	Beacon Hill	Victoria	1999	48	48	46	7	10	Vennesland (2000)
H101-001	Beacon Hill	Victoria	1998	20	20	20	7	17	Moul (1999a)
H101-001	Beacon Hill	Victoria	1997	10	10	10	1	2	Moul (1998a)
H101-001	Beacon Hill	Victoria	1996	12	12	12	3		Moul (1998a)
H101-001	Beacon Hill	Victoria	1990	27	27	27	0		Breault (1990)
H101-001	Beacon Hill	Victoria	1989	55	55	31	19	45	Breault (1989)
H101-001	Beacon Hill	Victoria	1988	64	63	50	37	74	Breault (1988)
H101-002	Government House	Victoria	1999	0	0				Moul (2000)
H101-002	Government House	Victoria	1998	5	0				Moul (1999a)
H101-002	Government House	Victoria	1997	6	6	6	0		Moul (1998a)
H101-002	Government House	Victoria	1996	7	7				Moul (1998a)
H101-003	Tillicum	Saanich	1998		0				Moul (1999a)
H101-003	Tillicum	Saanich	1997	2	0				Moul (1998a)
H101-003	Tillicum	Saanich	1996		0				Moul (1998a)
H101-003	Tillicum	Saanich	1995		0				Moul (1995)
H101-003	Tillicum	Saanich	1994		0				Moul (1994)
H101-003	Tillicum	Saanich	1993	11	11	11	0		Moul (1993)
H101-003	Tillicum	Saanich	1992	17	17	14	13	23	Moul (1992)
H101-003	Tillicum	Saanich	1991	24	24	13	0		Moul (1991)
H101-003	Tillicum	Saanich	1990	44	44	26	8	24	Breault (1990)
H101-003	Tillicum	Saanich	1989	21	21	18	12	31	Breault (1989)
H101-004	Sidney Island	Sidney	1997		0				Moul (1998a)
H101-004	Sidney Island	Sidney	1990	16	16	16	0		Butler (1997)
H101-004	Sidney Island	Sidney	1989	44	44	44	0		Butler (1997)
H101-004	Sidney Island	Sidney	1988	99	99	75	58	135	Butler (1997)
H101-004	Sidney Island	Sidney	1987	103	85	85	54	125	Butler (1997)
H101-004	Sidney Island	Sidney	1986	86	51				Elliott *et al.* (1989) Butler (1997) Elliott *et al.* (1989)
H101-004	Sidney Island	Sidney	1984	41	41	41	0		Butler (1997)
H101-004	Sidney Island	Sidney	1979	75	75				Forbes *et al.* (1985)
H101-004	Sidney Island	Sidney	1974	30	30				Forbes *et al.* (1985)
H101-005	McFadden Creek	Saltspring Island	1999	131	131	26	13	25	Vennesland (2000)
H101-005	McFadden Creek	Saltspring Island	1998	120	120	17	16	35	Moul (1999a)
H101-005	McFadden Creek	Saltspring Island	1997	118	118	21	19	51	Moul (1998a)
H101-005	McFadden Creek	Saltspring Island	1996	118	118				Moul (1998a)
H101-005	McFadden Creek	Saltspring Island	1990	1	1				Moul (1998a)
H101-006	Southey Point	Saltspring Island	1997		0				Moul (1998a)
H101-006	Southey Point	Saltspring Island	1989	25	21	21	15	28	Breault (1989)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H101-006	Southey Point	Saltspring Island	1980	4	4				Forbes *et al.* (1985)
H101-007	Madrona Creek	Saltspring Island	1997		0				Moul (1998a)
H101-007	Madrona Creek	Saltspring Island	1996	15	0				Moul (1998a)
H101-007	Madrona Creek	Saltspring Island	1994	15	15				Moul (1998a)
H101-008	Heron Basin	Sidney	1998		0				Moul (1999a)
H101-008	Heron Basin	Sidney	1997	3	0				Moul (1998a)
H101-009	Colwood-BFC	Victoria	1999	36	0				Vennesland (2000)
H101-009	Colwood-BFC	Victoria	1998	16	16	16	0		Moul (1999a)
H101-010	Cadboro Bay	Victoria	1999	3	3				Moul (2000)
H101-010	Cadboro Bay	Victoria	1998	1	1				Moul (1999a)
H101-011	Inskip Island	Victoria	1999		0				Moul (2000)
H101-011	Inskip Island	Victoria	1998	5	5				Moul (1999a)
H101-012	View Royal	Victoria	1999	10	10	10	0		Moul (1999a)
H101-013	Chatham Island	Oak Bay	1929	1	1				Forbes *et al.* (1985)
H101-014	Gabriola Island	Gabriola Island	1981	90	64				Forbes *et al.* (1985)
H101-014	Gabriola Island	Gabriola Island	1980	60	60				Butler (1997)
H101-014	Gabriola Island	Gabriola Island	1979	30	30				Butler (1997)
H101-015	Mandarti Island	Sidney	1950	1	1				Butler (1997)
H101-015	Mandarti Island	Sidney	1945	7	7				Forbes *et al.* (1985)
H101-015	Mandarti Island	Sidney	1936	1	1				Butler (1997)
H101-016	North Pender	North Pender	1974	1	1	1	1	1	Butler (1997)
H101-017	Portage Inlet	Victoria	1977	5	5				Forbes *et al.* (1985)
H101-018	Prevost Island	Saltspring Island	1974	59	59				Butler (1997)
H101-019	Beddis Road	Saltspring Island	1985		0				N. Raginsky (comm. pers.)
H101-019	Beddis Road	Saltspring Island	1981	70	70				N. Raginsky (comm. pers.)
H101-020	Saturna	Saturna Island	1920	1	1				Forbes *et al.* (1985)
H101-021	Secretary Island	Gulf Islands	1935	44	44				Butler (1997)
H101-021	Secretary Island	Gulf Islands	1934	12	12				Butler (1997)
H101-021	Secretary Island	Gulf Islands	1933	4	4				Butler (1997)
H101-021	Secretary Island	Gulf Islands	1932	1	1				Butler (1997)
H101-022	Thetis Lake	Victoria	1974	1	1				Forbes *et al.* (1985)
H101-022	Thetis Lake	Victoria	1962	8	8				Forbes *et al.* (1985)
H101-023	South Pender	S. Pender Island	1975	1	1	1	1	2	Forbes *et al.* (1985)
H101-024	Swartz Bay	Sidney	1970	1	1				Butler (1997)
H101-024	Swartz Bay	Sidney	1963	5	5				Butler (1997)
H101-025	Tsehum Harbour	Sidney	1957	11					Forbes *et al.* (1985)
H101-026	Saanichton Bay	Saanich	1999	35	29				Moul (2000)
H102-001	Whiffin Spit	Sooke	1999	17	16	16	0		Vennesland (2000)
H102-001	Whiffin Spit	Sooke	1998	46	40	40	0		Moul (1999a)

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Annexe 1 (*suite*)
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Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H102-001	Whiffin Spit	Sooke	1997	50	31	31	7	14	Moul (1998a)
H102-001	Whiffin Spit	Sooke	1996	43	43				Moul (1998a)
H102-001	Whiffin Spit	Sooke	1992	41	41				Moul (1992)
H102-001	Whiffin Spit	Sooke	1961	20	12				Butler (1997)
H102-001	Whiffin Spit	Sooke	1960	23	23				Butler (1997)
H102-002	Mill Bay	Mill Bay	1999	15	9	9	0		Vennesland (2000)
H102-002	Mill Bay	Mill Bay	1998	14	14	14	3	7	Moul (1999a)
H102-002	Mill Bay	Mill Bay	1997	8	8	3	3	7	Moul (1998a)
H102-003	Otter Point	Sooke	1961	8	8				Forbes *et al.* (1985)
H102-003	Otter Point	Sooke	1960	6	6				Butler (1997)
H102-004	Stoney Creek	Sooke	1961	2	2				Butler (1997)
H102-005	Cherry Point	Cowichan Bay	1939	1	1				Forbes *et al.* (1985)
H104-001	Quamichan Lake	Duncan	1997		0				Moul (1998a)
H104-001	Quamichan Lake	Duncan	1994		0				Moul (1994)
H104-001	Quamichan Lake	Duncan	1993	11	11	11	0		Moul (1993)
H104-001	Quamichan Lake	Duncan	1992	19	19	19	0		Moul (1992)
H104-001	Quamichan Lake	Duncan	1991	28	28	27	24	61	Moul (1991)
H104-001	Quamichan Lake	Duncan	1990	28	28	28	20	56	Breault (1990)
H104-001	Quamichan Lake	Duncan	1989	32	32	30	27	68	Breault (1989)
H104-002	Sahtlam	Duncan	1997		0				Moul (1998a)
H104-002	Sahtlam	Duncan	1996	11	0				Moul (1998a)
H104-002	Sahtlam	Duncan	1991	15	0				Moul (1991)
H104-002	Sahtlam	Duncan	1990	3	3	3	2	3	Breault (1990)
H104-002	Sahtlam	Duncan	1989	6	6	6	4	9	Breault (1989)
H104-003	Drinkwater Road	Duncan	1999	85	71	34	27	46	Vennesland (2000)
H104-003	Drinkwater Road	Duncan	1998	26	26	26			Moul (1999a)
H104-003	Drinkwater Road	Duncan	1997	35	19	19	5	14	Moul (1998a)
H104-004	Youbou	Cowichan Lake	1997		0				Moul (1998a)
H104-004	Youbou	Cowichan Lake	1990	1	1	1	1	2	Breault (1990)
H104-004	Youbou	Cowichan Lake	1989	1	1	1	1	4	Breault (1989)
H104-005	Cobble Hill	Duncan	1979	1	1				Forbes *et al.* (1985)
H104-005	Cobble Hill	Duncan	1978	6	6				Forbes *et al.* (1985)
H104-006	Cowichan	Duncan	1990	1	1	1	0		Butler (1997)
H104-006	Cowichan	Duncan	1989	1	1	1	0		Butler (1997)
H104-007	Cowichan Bay Village	Cowichan Bay	1979	34	28				Forbes *et al.* (1985)
H104-007	Cowichan Bay Village	Cowichan Bay	1973	12	12				Forbes *et al.* (1985)
H104-007	Cowichan Bay Village	Cowichan Bay	1952	32	32				Butler (1997)
H104-007	Cowichan Bay Village	Cowichan Bay	1950	32					Forbes *et al.* (1985)
H104-007	Cowichan Bay Village	Cowichan Bay	1945	2	2				Butler (1997)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H104-007	Cowichan Bay Village	Cowichan Bay	1931	8	8				Butler (1997)
H104-008	Cowichan Station	Cowichan Bay	1979		0				Forbes *et al.* (1985)
H104-008	Cowichan Station	Cowichan Bay	1977	8	8				Forbes *et al.* (1985)
H104-008	Cowichan Station	Cowichan Bay	1975	27	27				Forbes *et al.* (1985)
H104-008	Cowichan Station	Cowichan Bay	1973	12	12				Forbes *et al.* (1985)
H104-008	Cowichan Station	Cowichan Bay	1972	9	7				Forbes *et al.* (1985)
H104-009	Genoa Bay	Cowichan Bay	1979	9	9				Butler (1997)
H104-009	Genoa Bay	Cowichan Bay	1975		0				Forbes *et al.* (1985)
H104-009	Genoa Bay	Cowichan Bay	1972	17	10				Forbes *et al.* (1985)
H104-009	Genoa Bay	Cowichan Bay	1971	22	22				Forbes *et al.* (1985)
H104-009	Genoa Bay	Cowichan Bay	1970	16	13				Forbes *et al.* (1985)
H105-001	Shoal Island	Crofton	1998		0				Moul (1999a)
H105-001	Shoal Island	Crofton	1997	20	0				Moul (1998a)
H105-001	Shoal Island	Crofton	1996		0				Moul (1998a)
H105-001	Shoal Island	Crofton	1995	40	40	40	0		Moul (1995)
H105-001	Shoal Island	Crofton	1994	63	63	57	22	62	Moul (1994)
H105-001	Shoal Island	Crofton	1993	63	63	52	14	36	Moul (1993)
H105-001	Shoal Island	Crofton	1992	61	61	52	16	34	Moul (1992)
H105-001	Shoal Island	Crofton	1991	47	47	42	30	75	Moul (1991)
H105-001	Shoal Island	Crofton	1990	32	32	31	22	69	Breault (1990)
H105-001	Shoal Island	Crofton	1989	25	25	25	21	55	Moul (1990)
H105-001	Shoal Island	Crofton	1988	35	35	35	0		Moul (1990)
H105-001	Shoal Island	Crofton	1987	60	57	60	0		Butler (1989)
									Elliott *et al.* (1989)
H105-001	Shoal Island	Crofton	1986	64	64		40		Elliott *et al.* (1989)
H105-001	Shoal Island	Crofton	1982	20					Forbes *et al.* (1985)
H105-001	Shoal Island	Crofton	1979	1	1				Butler (1997)
H105-001	Shoal Island	Crofton	1975	75	75				Butler (1997)
H105-001	Shoal Island	Crofton	1974	130	85				Butler (1997)
H105-001	Shoal Island	Crofton	1973	59	52				Butler (1997)
H105-001	Shoal Island	Crofton	1970	40	40				Butler (1997)
H105-002	Holden Lake	Nanaimo	1999	43	26	20	8	17	Vennesland (2000)
H105-002	Holden Lake	Nanaimo	1998	21	21	20	17	44	Moul (1999a)
H105-002	Holden Lake	Nanaimo	1997	72	16	16	3	5	Moul (1999a)
H105-002	Holden Lake	Nanaimo	1996	90	72				Moul (1998a)
H105-002	Holden Lake	Nanaimo	1995	90	90				Moul (1995)
H105-002	Holden Lake	Nanaimo	1994	104	83				Moul (1994)
H105-002	Holden Lake	Nanaimo	1993	101	86	86	39	65	Moul (1993)
H105-002	Holden Lake	Nanaimo	1992	115	113	78	73	154	Moul (1992)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H105-002	Holden Lake	Nanaimo	1991	120	90	37	31	53	Moul (1991)
H105-002	Holden Lake	Nanaimo	1990	132	132		36	107	Breault (1990)
H105-002	Holden Lake	Nanaimo	1989	162	162	45	38	73	Breault (1989)
H105-002	Holden Lake	Nanaimo	1988	100	100	44	41	75	Breault (1988)
H105-003	Hammond Bay	Nanaimo	1992	0	0				Moul (1992)
H105-003	Hammond Bay	Nanaimo	1991	15	15	15	0		Moul (1991)
H105-003	Hammond Bay	Nanaimo	1990	19	19	17	14	37	Breault (1990)
H105-003	Hammond Bay	Nanaimo	1989	16	16	15	9	19	Breault (1989)
H105-003	Hammond Bay	Nanaimo	1988	24	24	22	13	21	Breault (1988)
H105-004	Brannen Lake	Nanaimo	1997	0	0				Moul (1998a)
H105-004	Brannen Lake	Nanaimo	1992	7	7	7	0		Moul (1992)
H105-004	Brannen Lake	Nanaimo	1991	2	2				Fichiers du MELP
H105-005	Northwest Bay	Parksville	1997	0	0				Moul (1998a)
H105-005	Northwest Bay	Parksville	1992		0				Moul (1992)
H105-005	Northwest Bay	Parksville	1991	8	8	8	1	2	Moul (1991)
H105-005	Northwest Bay	Parksville	1990	11	11		8	28	Breault (1990)
H105-005	Northwest Bay	Parksville	1989	8	8	8	7	19	Breault (1989)
H105-006	Soriel Road	Parksville	1998		0				Moul (1999a)
H105-006	Soriel Road	Parksville	1997	1	0				Moul (1998a)
H105-006	Soriel Road	Parksville	1993	4	4				Moul (1993)
H105-007	Protection Island	Nanaimo	1999		0				Moul (2000)
H105-007	Protection Island	Nanaimo	1998	9	0				Moul (1999a)
H105-007	Protection Island	Nanaimo	1997	5	5				Moul (1998a)
H105-008	Beachcomber	Nanoose Bay	1999	10	3	3	0		Vennesland (2000)
H105-008	Beachcomber	Nanoose Bay	1998	12	12	12	4	7	Moul (1999a)
H105-008	Beachcomber	Nanoose Bay	1997	5	5				Moul (1998a)
H105-009	Cottle Creek	Nanaimo	1999	4	0				Moul (2000)
H105-009	Cottle Creek	Nanaimo	1998	7	7				Moul (1999a)
H105-010	Jingle Pot Road	Nanaimo	1999	0	0				Moul (2000)
H105-011	Ladysmith	Ladysmith	1939	1	1				Forbes *et al.* (1985)
H105-012	Cedar Road	Nanaimo	1981	60					Forbes *et al.* (1985)
H105-013	Extention	Nanaimo	1981	1	1				Forbes *et al.* (1985)
H105-013	Extention	Nanaimo	1980	1	1				Forbes *et al.* (1985)
H105-013	Extention	Nanaimo	1972	3	3				Butler (1997)
H105-014	Yellowpoint	Ladysmith	1972	10	10				Forbes *et al.* (1985)
H105-015	Nanoose	Nanoose Bay	1980	8	8				Butler (1997)
H105-016	Parksville	Parksville	1981	6	6				Forbes *et al.* (1985)
H105-017	Acacia Road	Parksville	1992	1	1	1	0		Moul (1992)
H105-017	Acacia Road	Parksville	1991	1	1	1	0		Moul (1991)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H105-017	Acacia Road	Parksville	1990	1	1	1	1	4	Butler (1997)
H105-017	Acacia Road	Parksville	1989	1	1	1	1	4	Butler (1997)
H105-017	Acacia Road	Parksville	1988	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1987	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1986	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1985	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1984	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1983	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1982	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1981	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1980	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1979	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1978	1	1	1	1		Moul (1992)
H105-017	Acacia Road	Parksville	1977	1	1	1	1		Moul (1992)
H105-018	Gravel Pitt	Parksville	1990	10	10	10	0		Butler (1997)
H105-018	Gravel Pitt	Parksville	1989	9	9	9	9	23	Butler (1997)
H105-019	Industrial Way	Parksville	1988	4	4		0		Breault (1988)
H105-019	Industrial Way	Parksville	1987	1	1				Breault (1988)
H105-020	Englishman River	Parksville	1999	4	4				Moul (2000)
H106-001	North-west	Denman Island	1998	13	0				Moul (1999a)
H106-001	North-west	Denman Island	1997	22	3	3	1		Moul (1998a)
H106-001	North-west	Denman Island	1996	22	22				Moul (1998a)
H106-001	North-west	Denman Island	1991	14	14	14	2	4	Moul (1991)
H106-001	North-west	Denman Island	1990	4	4	4	1	3	Breault (1990)
H106-001	North-west	Denman Island	1989	17	17	17	16	46	Breault (1989)
H106-002	North End	Denman Island	1998	0	0				Moul (1999a)
H106-002	North End	Denman Island	1997	5	0				Moul (1998a)
H106-002	North End	Denman Island	1996	5	0				Moul (1998a)
H106-002	North End	Denman Island	1991	5	5	5	0		Moul (1991)
H106-002	North End	Denman Island	1990	18	18	18	0		Breault (1990)
H106-002	North End	Denman Island	1989	5	5	5	2	5	Breault (1989)
H106-002	North End	Denman Island	1980	9					Forbes *et al.* (1985)
H106-003	Denman Point	Denman Island	1999	11	0				Vennesland (2000)
H106-003	Denman Point	Denman Island	1998		0				Moul (1999a)
H106-003	Denman Point	Denman Island	1997	11	3	3	0		Moul (1998a)
H106-003	Denman Point	Denman Island	1996	11	11				Moul (1998a)
H106-003	Denman Point	Denman Island	1991	22	22	22	11	29	Moul (1991)
H106-003	Denman Point	Denman Island	1990	24	24	24	15	46	Breault (1990)
H106-003	Denman Point	Denman Island	1989	24	24	20	13	37	Breault (1989)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H106-004	Fillongley South	Denman Island	1996	13	0				Moul (1998a)
H106-004	Fillongley South	Denman Island	1991	13	0				Moul (1991)
H106-004	Fillongley South	Denman Island	1990	18	18	15	5	15	Breault (1990)
H106-004	Fillongley South	Denman Island	1989	15	15	14	7	16	Breault (1989)
H106-005	Landing	Hornby Island	1998	0	0				Moul (1999a)
H106-005	Landing	Hornby Island	1997	0	0				Moul (1998a)
H106-005	Landing	Hornby Island	1991	10	10	10	0		Moul (1991)
H106-005	Landing	Hornby Island	1990	9	9	5	4	11	Breault (1990)
H106-005	Landing	Hornby Island	1989	7	7	6	6	22	Breault (1989)
H106-006	Tralee 1	Hornby Island	1998	0	0				Moul (1999a)
H106-006	Tralee 1	Hornby Island	1997	7	0				Moul (1998a)
H106-006	Tralee 1	Hornby Island	1996	7	0				Moul (1998a)
H106-006	Tralee 1	Hornby Island	1991	0	0				Moul (1991)
H106-006	Tralee 1	Hornby Island	1990	17	17	17	4	10	Breault (1990)
H106-006	Tralee 1	Hornby Island	1989	15	15	15	15	34	Breault (1989)
H106-007	Tralee 2	Hornby Island	1998	0	0				Moul (1999a)
H106-007	Tralee 2	Hornby Island	1997	12	0				Moul (1998a)
H106-007	Tralee 2	Hornby Island	1996	12	2				Moul (1998a)
H106-007	Tralee 2	Hornby Island	1991	26	26	23	18	38	Moul (1991)
H106-007	Tralee 2	Hornby Island	1990	9	9	9	1	3	Breault (1990)
H106-007	Tralee 2	Hornby Island	1989	18	18	18	17	48	Breault (1989)
H106-008	Tralee Point	Hornby Island	1999	53	50	50	13	23	Vennesland (2000)
H106-008	Tralee Point	Hornby Island	1998	50	44	44	36	62	Moul (1999a)
H106-008	Tralee Point	Hornby Island	1997	40	38	24	17	48	Moul (1998a)
H106-008	Tralee Point	Hornby Island	1996	50	50				Moul (1998a)
H106-008	Tralee Point	Hornby Island	1991	0	0				Moul (1991)
H106-008	Tralee Point	Hornby Island	1990	32	32	24	22	42	Breault (1990)
H106-009	Fanny Bay	Fanny Bay	1997	3	0				Moul (1998a)
H106-009	Fanny Bay	Fanny Bay	1996	3	0				Moul (1998a)
H106-009	Fanny Bay	Fanny Bay	1991	10	0				Moul (1991)
H106-009	Fanny Bay	Fanny Bay	1988	15	15	15	3	7	Breault (1988)
H106-010	Union Bay South	Union Bay	1997	0	0				Moul (1998a)
H106-010	Union Bay South	Union Bay	1996		0				Moul (1998a)
H106-010	Union Bay South	Union Bay	1992		0				Moul (1992)
H106-010	Union Bay South	Union Bay	1991	8	6				Moul (1991)
H106-011	Union Bay North	Union Bay	1997	0	0				Moul (1998a)
H106-011	Union Bay North	Union Bay	1996	0	0				Moul (1998a)
H106-011	Union Bay North	Union Bay	1991	2	0				Moul (1991)
H106-011	Union Bay North	Union Bay	1988	6	6	6	3	6	Breault (1988)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H106-012	Union Bay	Union Bay	1999	26	19				M.B. Gebauer (inédit)
H106-012	Union Bay	Union Bay	1998	5	0				Moul (1999a)
H106-013	Little River	Comox	1998	0	0				Moul (1999a)
H106-013	Little River	Comox	1997	14	0				Moul (1998a)
H106-013	Little River	Comox	1996	24	0				Moul (1998a)
H106-013	Little River	Comox	1992	44	44	32	32	72	Moul (1992)
H106-013	Little River	Comox	1991	28	28	25	24	57	Moul (1991)
H106-013	Little River	Comox	1990	27	27	20	16	62	Breault (1990)
H106-013	Little River	Comox	1989	22	22	18	16	44	Breault (1989)
H106-014	Royston	Royston	1999	27	27	27	0		Vennesland (2000)
H106-014	Royston	Royston	1998	30	25	25	9	23	Moul (1999a)
H106-014	Royston	Royston	1997	19	18	5	5	13	Moul (1998a)
H106-015	Kitty-coleman Creek	Merville	1999	31	1	1	0		Vennesland (2000)
H106-015	Kitty-coleman Creek	Merville	1998	31	17	17	0		Moul (1999a)
H106-015	Kitty-coleman Creek	Merville	1997	25	19	8	8	14	Moul (1998a)
H106-016	Cougar Creek	Fanny Bay	1987	2	2				Fichiers du MELP
H106-017	Rosewall Creek	Fanny Bay	1987	10	10				Fichiers du MELP
H106-018	Cook Creek	Fanny Bay	1987	2	2				Fichiers du MELP
H106-019	Cougar Smith Creek	Fanny Bay	1987	9	9				Fichiers du MELP
H106-020	Cumberland Road	Comox	1980	19	19				Butler (1997)
H106-021	Bowser	Bowser	1976		0				Forbes *et al.* (1985)
H106-021	Bowser	Bowser	1975	18	18				Butler (1997)
H106-022	Killman Road	Union Bay	1999	5	5				Moul (2000)
H106-023	Whalebone Point	Denman Island	1981	70	70				Forbes *et al.* (1985)
H106-023	Whalebone Point	Denman Island	1980	45	45				Forbes *et al.* (1985)
H106-024	C.R. Airport	Campbell River	1988	1	1				Breault (1988)
H106-025	Hornby	Hornby Island	1966	34					Forbes *et al.* (1985)
H106-025	Hornby	Hornby Island	1962	16	16				Forbes *et al.* (1985)
H106-025	Hornby	Hornby Island	1961	33	30				Forbes *et al.* (1985)
H106-025	Hornby	Hornby Island	1960	30	30				Forbes *et al.* (1985)
H106-025	Hornby	Hornby Island	1959	30					Forbes *et al.* (1985)
H106-026	St. John's Point	Hornby Island	1962	1	1				Forbes *et al.* (1985)
H107-001	Somass River	Port Alberni	1992		0				Moul (1992)
H107-001	Somass River	Port Alberni	1971	10	10				Butler (1997)
H107-002	Alberni Inlet west	Port Alberni	1999		0				Moul (2000)
H110-001	Elk Falls	Campbell River	1987	10	10	10	0		Fichiers du MELP
H110-002	Tree Nursery A	Campbell River	1987	15	0				Fichiers du MELP
H110-003	Tree Nursery B	Campbell River	1988	3	3	3	0		Breault (1988)
H110-004	Tree Nursery C	Campbell River	1988	2	2				Breault (1988)

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Annexe 1 (*suite*)
Enregistrements des colonies de Grands Hérons de l'île de Vancouver, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H110-005	Menzies Bay	Campbell River	1997	1					Fichiers du MELP
H112-001	Ceepeecee	Ceepeecee	1991	4	4				Fichiers du MELP
H112-002	Tahsis	Tahsis	1989	10	10				Breault (1989)
H115-001	Smelt Bay	Cortes Island	1999	3	3				Moul (2000)
H115-001	Smelt Bay	Cortes Island	1998	5	2				Moul (1999a)
H115-001	Smelt Bay	Cortes Island	1997	0	0				Moul (1998a)
H115-001	Smelt Bay	Cortes Island	1996	0	0				Moul (1998a)
H115-001	Smelt Bay	Cortes Island	1992	12	12	12	2	2	Moul (1992)
H115-001	Smelt Bay	Cortes Island	1991	11	11	10	5	11	Moul (1991)
H115-001	Smelt Bay	Cortes Island	1980		0				Forbes *et al.* (1985)
H115-001	Smelt Bay	Cortes Island	1979	22	22				Butler (1997)
H115-002	Hague Lake	Cortes Island	1997	0	0				Moul (1998a)
H115-002	Hague Lake	Cortes Island	1996	3	0				Moul (1998a)
H115-002	Hague Lake	Cortes Island	1993	7	7				Moul (1998a)
H115-003	Whaletown	Cortes Island	1998		0				Moul (1999a)
H115-003	Whaletown	Cortes Island	1997	3	0				Moul (1998a)
H115-003	Whaletown	Cortes Island	1996	3	0				Moul (1998a)
H115-003	Whaletown	Cortes Island	1993	4	4				Moul (1998a)
H115-003	Whaletown	Cortes Island	1988	6	5				G. Sirk (comm. pers.)
H115-004	Gowland Island	Quadra Island	1988	4	0				Breault (1988)
H115-005	Heriot Bay	Quadra Island	1999	5	5	5	0		Moul (2000)
H115-006	Hyacinthe Bay	Quadra Island	1989	5	5	5	0		Moul (2000)
H115-006	Hyacinthe Bay	Quadra Island	1988	3	3	3	3		Moul (2000)
H115-006	Hyacinthe Bay	Quadra Island	1980		0				Forbes *et al.* (1985)
H115-006	Hyacinthe Bay	Quadra Island	1979	8					Forbes *et al.* (1985)
H115-007	Yaculta Village	Quadra Island	1987	1	1				Breault (1988)
H115-008	Cape Mudge	Quadra Island	1988	20	0				Breault (1988)

Abréviations utilisées: BFC = Base des Forces canadiennes
MELP = B.C. Ministry of Environment, Lands and Parks

Annexe 2

Enregistrements des colonies de Grands Hérons des basses terres du Fraser, de la Sunshine Coast et des régions de la rivière Powell, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H202-001	Greenwood Island	Hope	1979	10	10				Butler (1997)
H202-001	Greenwood Island	Hope	1973	1	1				Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1999	322	322	140	134	231	Vennesland (2000)
									A. Eissinger (comm. pers.)
H204-001	Point Roberts	Point Roberts	1998	337	304	272	233	534	A. Eissinger (comm. pers.)
H204-001	Point Roberts	Point Roberts	1997	393	294	328		537	A. Eissinger (comm. pers.)
H204-001	Point Roberts	Point Roberts	1996	444	444				A. Eissinger (comm. pers.)
H204-001	Point Roberts	Point Roberts	1995	472	472				Butler (1997)
H204-001	Point Roberts	Point Roberts	1994	414	414				Butler (1997)
H204-001	Point Roberts	Point Roberts	1993	400	400				Butler (1997)
H204-001	Point Roberts	Point Roberts	1992	474	235	25	25	76	Gebauer (1995a)
H204-001	Point Roberts	Point Roberts	1991	387	387				Butler (1997)
H204-001	Point Roberts	Point Roberts	1990	300	300				Butler (1997)
H204-001	Point Roberts	Point Roberts	1989	253	253				Butler (1997)
H204-001	Point Roberts	Point Roberts	1988	335	335				Butler (1997)
H204-001	Point Roberts	Point Roberts	1987	253	253				Butler (1997)
H204-001	Point Roberts	Point Roberts	1986	220	220				Butler (1997)
H204-001	Point Roberts	Point Roberts	1981	220	220	50	50	122	Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1980	250	222	53	53	156	Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1979	247	236	33	33	96	Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1978	226	210	39	39	98	Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1977	216	183	39	39	109	Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1974	30	30				Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1973	30	30				Forbes *et al.* (1985)
H204-001	Point Roberts	Point Roberts	1970	1	1				Forbes *et al.* (1985)
H204-002	Nicomekl	Crescent Beach	1999	34	34	30	15	36	Vennesland (2000)
H204-002	Nicomekl	Crescent Beach	1998	37	37	37	36	93	Vennesland (2000)
H204-002	Nicomekl	Crescent Beach	1997	30	30	7	7	19	Moul (1998b)
H204-002	Nicomekl	Crescent Beach	1995	35	35				Butler (1997)
H204-002	Nicomekl	Crescent Beach	1994	30	30				Gebauer (1995a)
H204-002	Nicomekl	Crescent Beach	1993	36	36				Gebauer (1995a)
H204-002	Nicomekl	Crescent Beach	1992	36	36	34	32	108	Gebauer (1995a)
H204-002	Nicomekl	Crescent Beach	1990	40	40	37	37	81	Butler (1997)
H204-002	Nicomekl	Crescent Beach	1988	38	38	30	25	59	Butler (1997)
H204-002	Nicomekl	Crescent Beach	1987	55	55	55	29		Elliott *et al.* (1989)
H204-002	Nicomekl	Crescent Beach	1986	23	23	23	12	25	Elliott *et al.* (1989)
H204-003	Serpentine	Surrey	1999		0				Vennesland (2000)
H204-003	Serpentine	Surrey	1998	8	8	8	0		Vennesland (2000)
H204-003	Serpentine	Surrey	1997	13	10	10	9	22	Moul (1998b)

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Annexe 2 (*suite*)

Enregistrements des colonies de Grands Hérons des basses terres du Fraser, de la Sunshine Coast et des régions de la rivière Powell, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H204-003	Serpentine	Surrey	1994	5	5				Gebauer (1995a)
H204-004	South # 7 Road	Richmond	1997	0	0				Moul (1998b)
H204-004	South # 7 Road	Richmond	1992	12	12	6	0		Gebauer (1995a)
H204-004	South # 7 Road	Richmond	1991	12	12	12	0		Butler (1997)
H204-004	South # 7 Road	Richmond	1989	16	12				Gebauer (1995a)
H204-004	South # 7 Road	Richmond	1987	7	7				Butler (1997)
H204-004	South # 7 Road	Richmond	1984	1	1				Forbes *et al.* (1985)
H204-005	Cessna Way	Richmond	1997	2	0				Moul (1998b)
H204-005	Cessna Way	Richmond	1992	12	0				Gebauer (1995a)
H204-005	Cessna Way	Richmond	1981	4	4		3	7	Forbes *et al.* (1985)
H204-006	Derby Reach	Langley	1997	5	0				Moul (1998b)
H204-006	Derby Reach	Langley	1994	0	0				Gebauer (1995a)
H204-006	Derby Reach	Langley	1993	0	0				Gebauer (1995a)
H204-006	Derby Reach	Langley	1992	37	0				Gebauer (1995a)
H204-006	Derby Reach	Langley	1991	40	40	40	0		Gebauer (1995a)
H204-006	Derby Reach	Langley	1981	33	31	15	12	32	Butler (1997)
H204-006	Derby Reach	Langley	1980	38	30				Butler (1997)
H204-006	Derby Reach	Langley	1979	38	38		12	37	Butler (1997)
H204-006	Derby Reach	Langley	1978	31	31				Butler (1997)
H204-006	Derby Reach	Langley	1977	16	16				Butler (1997)
H204-006	Derby Reach	Langley	1976	20	20				Butler (1997)
H204-006	Derby Reach	Langley	1975	18	18				Butler (1997)
H204-006	Derby Reach	Langley	1974	17	17				Butler (1997)
H204-007	N Delta River Road	North Delta	1998		0				Vennesland (2000)
H204-007	N Delta River Road	North Delta	1997	0	0				Moul (1998b)
H204-007	N Delta River Road	North Delta	1994		0				Gebauer (1995a)
H204-007	N Delta River Road	North Delta	1993		0				Gebauer (1995a)
H204-007	N Delta River Road	North Delta	1992	6	6	6	0		Gebauer (1995a)
H204-008	Chilliwack City	Chilliwack	1998	0	0				Vennesland (2000)
H204-008	Chilliwack City	Chilliwack	1997	15	15	15	0		Moul (1998b)
H204-008	Chilliwack City	Chilliwack	1994	15	12				Gebauer (1995a)
H204-008	Chilliwack City	Chilliwack	1993	5	5				Gebauer (1995a)
H204-009	BFC Chilliwack	Chilliwack	1999	114	114	27	22	44	Vennesland (2000)
H204-009	BFC Chilliwack	Chilliwack	1998	83	83	83	82	184	Vennesland (2000)
H204-009	BFC Chilliwack	Chilliwack	1997	93	80	12	8	18	Moul (1998b)
H204-009	BFC Chilliwack	Chilliwack	1994	140	140				Gebauer (1995a)
H204-009	BFC Chilliwack	Chilliwack	1993	140	140				Gebauer (1995a)
H204-009	BFC Chilliwack	Chilliwack	1992	152	152	152	54	152	Gebauer (1995a)
H204-009	BFC Chilliwack	Chilliwack	1980	104	91		43	113	Forbes *et al.* (1985)

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Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H204-009	BFC Chilliwack	Chilliwack	1979	110	109				Forbes *et al.* (1985)
H204-009	BFC Chilliwack	Chilliwack	1978	101	101				Forbes *et al.* (1985)
H204-009	BFC Chilliwack	Chilliwack	1977	96	88		34	89	Forbes *et al.* (1985)
H204-009	BFC Chilliwack	Chilliwack	1976	50	50				Forbes *et al.* (1985)
H204-010	Vedder Canal	Chilliwack	1999	3	3	3	0		Vennesland (2000)
H204-010	Vedder Canal	Chilliwack	1998	2	2	2	2	5	Vennesland (2000)
H204-010	Vedder Canal	Chilliwack	1997	3	3	3	3	10	Moul (1999b)
H204-011	Boundary Bay	Delta	1998		0				Moul (1999b)
H204-011	Boundary Bay	Delta	1997		0				Moul (1998b)
H204-011	Boundary Bay	Delta	1996	14	0				Butler (1997)
H204-012	Tilbury Island	Delta	1999	12	12	10	8	19	Vennesland (2000)
H204-012	Tilbury Island	Delta	1998	8	8	8	8	22	Vennesland (2000)
H204-013	White Rock	White Rock	1962	1	1				Forbes *et al.* (1985)
H204-014	Crescent Beach	South Surrey	1980	41	41		22	50	Forbes *et al.* (1985)
H204-014	Crescent Beach	South Surrey	1979	42	42		13	40	Forbes *et al.* (1985)
H204-014	Crescent Beach	South Surrey	1978	46	46		17	47	Forbes *et al.* (1985)
H204-014	Crescent Beach	South Surrey	1977	39	37		18	53	Forbes *et al.* (1985)
H204-014	Crescent Beach	South Surrey	1968	1	1				Forbes *et al.* (1985)
H204-014	Crescent Beach	South Surrey	1967	1	1				Forbes *et al.* (1985)
H204-015	Sea Island 2	Richmond	1992	12	12				Butler (1997)
H204-015	Sea Island 2	Richmond	1987	7	7				Butler (1997)
H204-016	Fort Langley	Langley	1963	12	12				Forbes *et al.* (1985)
H204-016	Fort Langley	Langley	1944	1	1				Forbes *et al.* (1985)
H204-017	Tsawwassen	Tsawwassen	1961	1	1				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1960		0				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1959	100	100				Forbes *et al.* (1985)
H204-017	Tsawwassen	Tsawwassen	1958	100	100				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1956	85	85				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1955	85	85				Butler (1997)
H204-017	Tsawwassen	Tsawwassen	1949	185	185				Forbes *et al.* (1985)
H204-017	Tsawwassen	Tsawwassen	1948	165	165				Forbes *et al.* (1985)
H204-018	Douglas Island	Port Coquitlam	1977	1	1				Forbes *et al.* (1985)
H204-018	Douglas Island	Port Coquitlam	1973	1	1				Forbes *et al.* (1985)
H204-019	Poplar Island	New Westminster	1974	10	10				Forbes *et al.* (1985)
H204-019	Poplar Island	New Westminster	1973	1	1				Forbes *et al.* (1985)
H204-020	McGillivray Slough	Sumas Mt.	1977	51	46				Forbes *et al.* (1985)
H204-020	McGillivray Slough	Sumas Mt.	1974	27					Forbes *et al.* (1985)
H204-020	McGillivray Slough	Sumas Mt.	1920	1	1				Forbes *et al.* (1985)
H204-021	McMillian Island	Fort Langley	1964	35	35				Forbes *et al.* (1985)

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Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H204-022	Mount Lehman	Abbotsford	1988	1	1				Forbes *et al.* (1985)
H204-022	Mount Lehman	Abbotsford	1970	10	10				Forbes *et al.* (1985)
H204-023	Sea Island 1	Richmond	1949	40	40				Forbes *et al.* (1985)
H204-023	Sea Island 1	Richmond	1945	40	40				Forbes *et al.* (1985)
H204-023	Sea Island 1	Richmond	1943	40	40				Forbes *et al.* (1985)
H204-023	Sea Island 1	Richmond	1941	40	40				Forbes *et al.* (1985)
H205-001	Paq Lake	Pender Harbour	1997	0	0				Moul (1998b)
H205-001	Paq Lake	Pender Harbour	1994	8	8				Gebauer (1995b)
H205-001	Paq Lake	Pender Harbour	1993	10	10	10	8	11	Gebauer (1995b)
H205-001	Paq Lake	Pender Harbour	1992	5	5	5	1	2	Moul (1992)
H205-002	Halfmoon Bay	Halfmoon Bay	1999	5	3	3	0		Vennesland (2000)
H205-002	Halfmoon Bay	Halfmoon Bay	1998	3	3				Moul (1999b)
H205-002	Halfmoon Bay	Halfmoon Bay	1997	7	0				Moul (1998b)
H205-002	Halfmoon Bay	Halfmoon Bay	1994	19	19				Gebauer (1995b)
H205-002	Halfmoon Bay	Halfmoon Bay	1993	16	14	14	12	20	Gebauer (1995b)
H205-003	Acorn Street	Sechelt	1999	5	5	5	0		Vennesland (2000)
H205-003	Acorn Street	Sechelt	1998	2	2	2	0		Moul (1999b)
H205-003	Acorn Street	Sechelt	1997	6	6	6	1		Moul (1998b)
H205-003	Acorn Street	Sechelt	1994	1	1				Gebauer (1995b)
H205-003	Acorn Street	Sechelt	1993	11	11	11	3	6	Gebauer (1995b)
H205-004	Stewart Road	Gibsons	1997		0				Moul (1998b)
H205-004	Stewart Road	Gibsons	1994	2	2	2	0		Butler (1997)
H205-004	Stewart Road	Gibsons	1993	4	4	4	0		Butler (1997))
H205-005	Storm Bay	Sechelt Inlet	1997		0				Moul (1998b)
H205-005	Storm Bay	Sechelt Inlet	1993	10	10				Gebauer (1995b)
H205-006	Sutton Islets	Egmont	1999		0				Vennesland (2000)
H205-006	Sutton Islets	Egmont	1998	5	5	5	0		Vennesland (2000)
H205-006	Sutton Islets	Egmont	1997	0	0				Moul (1998b)
H205-006	Sutton Islets	Egmont	1994	1	1				Gebauer (1995b)
H205-006	Sutton Islets	Egmont	1993	10	10				Gebauer (1995b)
H205-007	Earles Cove	Earles Cove	1999	1	1	1	1		Gebauer (inédit)
H205-008	Town-site	Gibsons Landing	1977	10	10				Forbes *et al.* (1985)
H205-009	Twin Creeks	Gibsons Landing	1980	2	2	2	2	2	Forbes *et al.* (1985)
H205-009	Twin Creeks	Gibsons Landing	1979	1	1		0		Forbes *et al.* (1985)
H205-009	Twin Creeks	Gibsons Landing	1978	54	54		0		Forbes *et al.* (1985)
H205-010	Gunboat Bay	Pender Harbour	1981	30	0				Forbes *et al.* (1985)
H205-010	Gunboat Bay	Pender Harbour	1980	0	0				Forbes *et al.* (1985)
H205-010	Gunboat Bay	Pender Harbour	1979	94	44		18	54	Forbes *et al.* (1985)
H205-010	Gunboat Bay	Pender Harbour	1978	93	43		19	40	Forbes *et al.* (1985)

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Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H205-010	Gunboat Bay	Pender Harbour	1977	75	75				Forbes *et al.* (1985)
H205-010	Gunboat Bay	Pender Harbour	1963	75	75				Forbes *et al.* (1985)
H205-011	Tuwanek	Sechelt	1999	5	3	3	0		Vennesland (2000)
H207-001	Brackendale	Squamish	1993	5	0				Butler (1997)
H208-001	Pacific Spirit Park	Vancouver	1999	188	174	174	106	233	Vennesland (2000)
H208-001	Pacific Spirit Park	Vancouver	1998	190	190	190	70	102	Vennesland (2000)
H208-001	Pacific Spirit Park	Vancouver	1997	119	75	38	20	48	Moul (1998b)
H208-001	Pacific Spirit Park	Vancouver	1996	217	217				Butler (1997)
H208-001	Pacific Spirit Park	Vancouver	1994	169	169				Gebauer (1995a)
H208-001	Pacific Spirit Park	Vancouver	1993	162	162				Gebauer (1995a)
H208-001	Pacific Spirit Park	Vancouver	1992	142	142	49	39	100	Gebauer (1995a)
H208-001	Pacific Spirit Park	Vancouver	1990	157	140	20	17	48	Elliott (comm. pers.)
H208-001	Pacific Spirit Park	Vancouver	1989	141	141	12	10	22	Elliott (comm. pers.)
H208-001	Pacific Spirit Park	Vancouver	1988	158	158	17	14	36	Butler (1997) (comm. pers.)
H208-001	Pacific Spirit Park	Vancouver	1987	214	156	156	126	233	Butler (1997)
									Elliott *et al.* (1989)
H208-001	Pacific Spirit Park	Vancouver	1986	78	78	78	46	92	Elliott *et al.* (1989)
H208-001	Pacific Spirit Park	Vancouver	1981	150	125		42	81	Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1980	147	130		51	122	Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1979	130	130		22	64	Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1978	128	108		30	83	Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1977	92	82		23	50	Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1974	1	1				Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1973	1	1				Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1972	30	30				Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1971	75	75				Forbes *et al.* (1985)
H208-001	Pacific Spirit Park	Vancouver	1970	127	120				Forbes *et al.* (1985)
H208-002	Stanley Park Aquarium	Vancouver	1999	3	3	3	0		Vennesland (2000)
H208-002	Stanley Park Aquarium	Vancouver	1998	3	3		0		Vennesland (2000)
H208-002	Stanley Park Aquarium	Vancouver	1997	20	19	19	0		Moul (1998b)
H208-002	Stanley Park Aquarium	Vancouver	1995	19	19	19	19	49	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1994	17	16	16	16	38	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1993	30	30				Gebauer (1995a)
H208-002	Stanley Park Aquarium	Vancouver	1992	33	33	32	31	90	Gebauer (1995a)
H208-002	Stanley Park Aquarium	Vancouver	1991	19	19				Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1990	30	30	15		38	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1989	30	30	20		38	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1987	31	31	16		56	Butler (1997)
H208-002	Stanley Park Aquarium	Vancouver	1981	29	20		9	20	Forbes *et al.* (1985)

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Enregistrements des colonies de Grands Hérons des basses terres du Fraser, de la Sunshine Coast et des régions de la rivière Powell, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H208-002	Stanley Park Aquarium	Vancouver	1980	33	33		19	39	Forbes *et al.* (1985)
H208-002	Stanley Park Aquarium	Vancouver	1979	40	38	38	38	91	Forbes *et al.* (1985)
H208-002	Stanley Park Aquarium	Vancouver	1978	44	44		22	56	Forbes *et al.* (1985)
H208-002	Stanley Park Aquarium	Vancouver	1977	31	19		12	28	Forbes *et al.* (1985)
H208-003	Cliff Street	Burnaby	1999	50	50				Vennesland (2000)
H208-003	Cliff Street	Burnaby	1998	50	50	50	48	141	Vennesland (2000)
H208-003	Cliff Street	Burnaby	1997	20	20				Moul (1998b)
H208-003	Cliff Street	Burnaby	1994	20	20				Gebauer (1995a)
H208-003	Cliff Street	Burnaby	1993	20	20				Gebauer (1995a)
H208-003	Cliff Street	Burnaby	1992	20	20				Gebauer (1995a)
H208-004	Admiralty Point	Port Moody	1994	10	10				Gebauer (1995a)
H208-005	Mary Hill	Port Coquitlam	1999	107	107	17	17	38	Vennesland (2000)
H208-005	Mary Hill	Port Coquitlam	1998	108	108	45	35	84	Vennesland (2000)
H208-005	Mary Hill	Port Coquitlam	1997	62	62	62	0		Moul (1998b)
H208-005	Mary Hill	Port Coquitlam	1994	52	52				Gebauer (1995a)
H208-005	Mary Hill	Port Coquitlam	1993	22	22				Gebauer (1995a)
H208-005	Mary Hill	Port Coquitlam	1992	16	16	11	11	16	Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1997	0	0				Moul (1998b)
H208-006	McIvor Road	Maple Ridge	1994	43	43				Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1993	30	30				Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1992	10	10				Gebauer (1995a)
H208-006	McIvor Road	Maple Ridge	1979	8	5		5	15	Butler (1997)
H208-006	McIvor Road	Maple Ridge	1978	10	8		6	13	Butler (1997)
H208-006	McIvor Road	Maple Ridge	1977	10	10		8	15	Butler (1997)
H208-007	North Alouette River	Pitt Meadows	1997	0	0				Moul (1998b)
H208-007	North Alouette River	Pitt Meadows	1994		0				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1993		0				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1992	65	0				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1991	70	70				Gebauer (1995a)
H208-007	North Alouette River	Pitt Meadows	1974	10	10				Butler (1997)
H208-008	Rennie Road	Pitt Meadows	1997	0	0				Moul (1998b)
H208-008	Rennie Road	Pitt Meadows	1993	6	4	4	0		Gebauer (1995a)
H208-008	Rennie Road	Pitt Meadows	1992	6	0				Butler (1997)
H208-009	McCormick Marsh	Matsqui	1997	0	0				Moul (1998b)
H208-009	McCormick Marsh	Matsqui	1993	0	0				Gebauer (1995a)
H208-009	McCormick Marsh	Matsqui	1992	12	0				Gebauer (1995a)
H208-009	McCormick Marsh	Matsqui	1989	40	40				P. Whitehead (comm. pers.)
H208-010	Crescent Island	Matsqui	1997	0	0				Moul (1998b)
H208-010	Crescent Island	Matsqui	1992	0	0				Gebauer (1995a)

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Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H208-010	Crescent Island	Matsqui	1991	6	0				Butler (1997)
H208-010	Crescent Island	Matsqui	1990	8	0	6	0		Gebauer (1995a)
H208-010	Crescent Island	Matsqui	1974	1	1				Forbes *et al.* (1985)
H208-010	Crescent Island	Matsqui	1963	1	1				Forbes *et al.* (1985)
H208-010	Crescent Island	Matsqui	1962	3	3				Forbes *et al.* (1985)
H208-010	Crescent Island	Matsqui	1960	0	0				Butler (1997)
H208-011	De Boville Slough 1	Coquitlam	1997	0	0				Moul (1998b)
H208-011	De Boville Slough 1	Coquitlam	1994	0	0				Gebauer (1995a)
H208-011	De Boville Slough 1	Coquitlam	1993	34	34	34	0		Butler (1997)
H208-011	De Boville Slough 1	Coquitlam	1992	70	70	59	0		Gebauer (1995a)
H208-012	De Boville Slough 2	Coquitlam	1997	0	0				Moul (1998b)
H208-012	De Boville Slough 2	Coquitlam	1994	34	0				Butler (1997)
H208-012	De Boville Slough 2	Coquitlam	1993	34	34	34	0		Gebauer (1995a)
H208-012	De Boville Slough 2	Coquitlam	1992	50	50	50	38	72	Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1997	0	0				Moul (1998b)
H208-013	Colony Farm	Port Coquitlam	1994	1	0				Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1993	1	1	1	0		Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1992	4	4	4	2	8	Gebauer (1995a)
H208-013	Colony Farm	Port Coquitlam	1978	162	162		43	99	Butler (1997)
H208-013	Colony Farm	Port Coquitlam	1977	169	169		42	97	Butler (1997)
H208-013	Colony Farm	Port Coquitlam	1973	59	48				Butler (1997)
H208-014	Clayburn	Matsqui	1997	0	0				Moul (1998b)
H208-014	Clayburn	Matsqui	1995		0				Gebauer (1995a)
H208-014	Clayburn	Matsqui	1994		0				Butler (1997)
H208-014	Clayburn	Matsqui	1993	7	2	2	0		Gebauer (1995a)
H208-015	Alouette River	Maple Ridge	1999	120	120	64	49	79	Vennesland (2000)
H208-015	Alouette River	Maple Ridge	1998	86	86	66	66	171	Vennesland (2000)
H208-015	Alouette River	Maple Ridge	1997	63	63				Moul (1998b)
H208-016	Mission - Silvermere	Mission	1999	45	39	36	27	51	Vennesland (2000)
H208-016	Mission - Silvermere	Mission	1998	60	60	60	56	119	Vennesland (2000)
H208-016	Mission - Silvermere	Mission	1997	10	10				Moul (1998b)
H208-017	Hatzic Lake	Mission	1999	67	67	56	47	112	Vennesland (2000)
H208-017	Hatzic Lake	Mission	1998	65	65	45	45	117	Vennesland (2000)
H208-018	Horseshoe Bay	West Vancouver	1999	2	2	2	2	8	Vennesland (2000)
H208-020	Rippington Road	Pitt Meadows	1981	8	6		4	10	Forbes *et al.* (1985)
H208-020	Rippington Road	Pitt Meadows	1980	6	4		4	13	Forbes *et al.* (1985)
H208-020	Rippington Road	Pitt Meadows	1979	1	1				Forbes *et al.* (1985)
H208-021	Port Coquitlam RI 2	Port Coquitlam	1980	26	26	26	26	55	Forbes *et al.* (1985)
H208-021	Port Coquitlam RI 2	Port Coquitlam	1979	34	31		17	30	Forbes *et al.* (1985)

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Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantiilon	Nombre de nids productifs	Nombre de héronneaux	Source
H208-021	Port Coquitlam RI 2	Port Coquitlam	1978	162	162		43	99	Forbes *et al.* (1985)
H208-021	Port Coquitlam RI 2	Port Coquitlam	1977	169	169		42	98	Forbes *et al.* (1985)
H208-021	Port Coquitlam RI 2	Port Coquitlam	1973	59	48				Forbes *et al.* (1985)
H208-022	Widgeon Creek	Pitt Meadows	1979	2	2				Forbes *et al.* (1985)
H208-023	UBC - Marine Drive	UBC	1973	1	1				Forbes *et al.* (1985)
H208-023	UBC - Marine Drive	UBC	1972	30	30				Forbes *et al.* (1985)
H208-023	UBC - Marine Drive	UBC	1971	67	67	67	67	174	Forbes *et al.* (1985)
H208-023	UBC - Marine Drive	UBC	1970	130	130				Forbes *et al.* (1985)
H208-024	Lion's Bay	Lion's Bay	1980	4	4				Forbes *et al.* (1985)
H208-025	Alice Lake	Squamish	1993	1	1				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1980	13	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1979	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1978	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1977	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1975	10	10				Butler (1997)
H208-026	UBC Research Forest	Pitt Meadows	1974	10	10				Butler (1997)
H208-028	Ruskin	Maple Ridge	1964	35	35				Butler (1997)
H208-028	Ruskin	Maple Ridge	1963	30	30				Butler (1997)
H208-028	Ruskin	Maple Ridge	1925	1	1				Butler (1997)
H208-029	Burnaby Lake	Burnaby	1942	1	1				Forbes *et al.* (1985)
H208-029	Burnaby Lake	Burnaby	1933	1	1				Forbes *et al.* (1985)
H208-030	Burnaby Mountain	Burnaby	1996	20	20				Butler (1997)
H208-030	Burnaby Mountain	Burnaby	1992	20	20				Butler (1997)
H208-031	Nature Park	Port Coquitlam	1973		0				Forbes *et al.* (1985)
H208-031	Nature Park	Port Coquitlam	1971	76	68	68	68	190	Forbes *et al.* (1985)
H208-032	Dewdney 2	Maple Ridge	1971	0	0				Forbes *et al.* (1985)
H208-032	Dewdney 2	Maple Ridge	1970	30	30				Forbes *et al.* (1985)
H208-032	Dewdney 2	Maple Ridge	1963	20	20				Forbes *et al.* (1985)
H208-033	Dewdney 3	Maple Ridge	1974	0	0				Forbes *et al.* (1985)
H208-033	Dewdney 3	Maple Ridge	1973	9	9				Forbes *et al.* (1985)
H208-034	Dewdney 1	Maple Ridge	1974	0	0				Forbes *et al.* (1985)
H208-034	Dewdney 1	Maple Ridge	1973	9	9				Forbes *et al.* (1985)
H208-034	Dewdney 1	Maple Ridge	1972	11	11				Forbes *et al.* (1985)
H208-035	North Vancouver	N. Vancouver	1929	1	1				Forbes *et al.* (1985)
H208-035	North Vancouver	N. Vancouver	1923	18	18				Forbes *et al.* (1985)
H208-036	Crane Ponds	Pitt Meadows	1981	5	0				Butler (1997)
H208-036	Crane Ponds	Pitt Meadows	1980	1	0				Butler (1997)
H208-036	Crane Ponds	Pitt Meadows	1979	1	1	1	1	1	Butler (1997)
H208-037	Stanley Park - Beaver L	Vancouver	1977	31	19		12	28	Forbes *et al.* (1985)

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Annexe 2 (*suite*)

Enregistrements des colonies de Grands Hérons des basses terres du Fraser, de la Sunshine Coast et des régions de la rivière Powell, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H208-037	Stanley Park - Beaver L	Vancouver	1974	21	21				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1971	30	30				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1970	40	40				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1969	25	25				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1968	25	25				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1967	40	40				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1966	28	28				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1961	25	25				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1959	25	25				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1928	27	27				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1923	23	23				Forbes *et al.* (1985)
H208-037	Stanley Park - Beaver L	Vancouver	1921	37	37				Forbes *et al.* (1985)
H208-038	Fraser Mills	Maillardville	1960	45	38				Forbes *et al.* (1985)
H212-001	Scuttle Bay	Powell River	1997	0	0				Moul (1998b)
H212-001	Scuttle Bay	Powell River	1994	20	20				Moul (1994)
H212-002	Gibsons Beach	Powell River	1999	0	0				Vennesland (2000)
H212-002	Gibsons Beach	Powell River	1997	0	0				Moul (1998b)
H212-002	Gibsons Beach	Powell River	1992	0	0				Moul (1992)
H212-002	Gibsons Beach	Powell River	1991	13	13	13	0		Moul (1991)
H212-002	Gibsons Beach	Powell River	1990	38	35	33	22	51	Breault (1990)
H212-003	Willingdon Beach	Powell River	1999	0	0				Vennesland (2000)
H212-003	Willingdon Beach	Powell River	1997	0	0				Moul (1998b)
H212-003	Willingdon Beach	Powell River	1994	6	5				Gebauer (1995b)
H212-003	Willingdon Beach	Powell River	1993	10	10	10	0		Gebauer (1995b)
H212-003	Willingdon Beach	Powell River	1980	29	19				Forbes *et al.* (1985)
H212-003	Willingdon Beach	Powell River	1978	6					Forbes *et al.* (1985)
H212-003	Willingdon Beach	Powell River	1974		14				Forbes *et al.* (1985)
H212-003	Willingdon Beach	Powell River	1973	30					Forbes *et al.* (1985)
H212-004	Hazelton Street	Powell River	1999	0	0				Vennesland (2000)
H212-004	Hazelton Street	Powell River	1997	0	0				Moul (1998b)
H212-004	Hazelton Street	Powell River	1994	8	7				Moul (1994)
H212-004	Hazelton Street	Powell River	1993	7	7	7	4	6	Moul (1993)
H212-005	Penticton Street	Powell River	1999	0	0				Vennesland (2000)
H212-005	Penticton Street	Powell River	1997		0				Moul (1998b)
H212-005	Penticton Street	Powell River	1992		0				Moul (1992)
H212-005	Penticton Street	Powell River	1991		0				Moul (1991)
H212-005	Penticton Street	Powell River	1989	4	4	4	0		Breault (1989)
H212-005	Penticton Street	Powell River	1988	42	42	42	0		Breault (1988)
H212-006	Myrtle Beach	Powell River	1999	0	0				Vennesland (2000)

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Annexe 2 (*suite*)

Enregistrements des colonies de Grands Hérons des basses terres du Fraser, de la Sunshine Coast et des régions de la rivière Powell, Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H212-006	Myrtle Beach	Powell River	1997	0	0				Moul (1998b)
H212-006	Myrtle Beach	Powell River	1994	2	2				Gebauer (1995b)
H212-006	Myrtle Beach	Powell River	1993	6	6				Gebauer (1995a)
H212-007	Okeover Inlet	Powell River	1999	0	0				Vennesland (2000)
H212-007	Okeover Inlet	Powell River	1997	0	0				Moul (1998b)
H216-001	Snug Cove A	Bowen Island	1999	1	1	1	0		Vennesland (2000)
H216-002	Snug Cove B	Bowen Island	1999	2	2	2	2	4	Vennesland (2000)
H216-003	Anvil Island	Anvil Island	1980	8	0				Forbes *et al.* (1985)
H216-003	Anvil Island	Anvil Island	1974	1	1				Forbes *et al.* (1985)
H216-003	Anvil Island	Anvil Island	1972	1	1				Forbes *et al.* (1985)
H216-004	Nelson Island	Nelson Island	1980	1	0				Forbes *et al.* (1985)
H216-004	Nelson Island	Nelson Island	1977	1	0				Butler (1997)
H218-001	Cheam Lake	Agassiz	1999	15	15				Vennesland (2000)
H218-001	Cheam Lake	Agassiz	1997	0	0				Moul (1998b)
H218-001	Cheam Lake	Agassiz	1994	10	10				Gebauer (1995a)
H218-001	Cheam Lake	Agassiz	1993	15	15				Gebauer (1995a)
H218-001	Cheam Lake	Agassiz	1992	13	13				Gebauer (1995a)
H219-001	Harrison River	Harrison Mills	1999	0	0				Vennesland (2000)
H219-001	Harrison River	Harrison Mills	1998	20	15	20	0		Vennesland (2000)
H219-001	Harrison River	Harrison Mills	1997	27	27	27	0		Moul (1998b)
H219-001	Harrison River	Harrison Mills	1994	40	40				Gebauer (1995a)
H219-001	Harrison River	Harrison Mills	1993	40	40				Gebauer (1995a)
H219-001	Harrison River	Harrison Mills	1992	63	63	63	19	36	Gebauer (1995a)
H219-002	Chehalis River	Harrison Mills	1979	84	0				Forbes *et al.* (1985)
H219-002	Chehalis River	Harrison Mills	1960	1	1				Forbes *et al.* (1985)
H219-002	Chehalis River	Harrison Mills	1959	1	1				Forbes *et al.* (1985)
H219-002	Chehalis River	Harrison Mills	1958	1	1				Forbes *et al.* (1985)
H219-002	Chehalis River	Harrison Mills	1957	1	1				Forbes *et al.* (1985)

Abréviations utilisées: BFC = Base des Forces canadiennes
RI = Réserve indienne
UBC = University of British Columbia

Annexe 3

Enregistrements des colonies de Grands Hérons de la North Coast et des îles de la Reine-Charlotte, Colombie-Britannique, 1920–1997

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H612-001	Kunghit Island	South Moresby	1946	1	1				Forbes *et al.* (1985)
H613-001	Massett	Graham Island	1920	1	1				Forbes *et al.* (1985)
H613-002	Massett Inlet	Graham Island	1927	1	1				Forbes *et al.* (1985)
H613-003	Yakoun River Estuary	Port Clements	1996	2	2				A. Cober (comm. pers.)
H613-004	Chinkundl Creek	Skidegate	1997	2	2				A. Hetherington (comm. pers.)
H613-005	Demon Creek	Graham Island	1997	3	3				A. Hetherington (comm. pers.)

Annexe 4

Enregistrements des colonies de Grands Hérons des régions de l'intérieur de la Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H318-001	Grant Ranch	Lower Nicola	1999	7					K. Shewchuk (comm. pers.)
H320-001	Nicola River	Merrit	1982	1	1				Forbes *et al.* (1985)
H326-001	Chum Lake	S. Thompson R.	1980	3	3				Forbes *et al.* (1985)
H326-001	Chum Lake	S. Thompson R.	1973	1	1				Forbes *et al.* (1985)
H326-002	Chum Lake - east	S. Thompson R.	1980	1	1				Forbes *et al.* (1985)
H338-001	Darfield	N. Thompson R.	1980	11	9				Forbes *et al.* (1985)
H404-001	Moyie Lake	Cranbrook	1983	15	11				Forbes *et al.* (1985)
H404-001	Moyie Lake	Cranbrook	1982	11	11				Forbes *et al.* (1985)
H404-001	Moyie Lake	Cranbrook	1981	11					Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1983	66	57				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1982	54	54				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1981	70	55				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1980	85	63				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1977	93	93				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1975	122	122				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1973	114	114				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1972	95	95				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1971	90	90				Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1968	80					Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1968	80	80		23	28	Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1966	77					Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1948	40					Forbes *et al.* (1985)
H406-001	Duck Lake	Creston	1947	40					Forbes *et al.* (1985)
H406-002	Goat River	Creston	1984	33	33				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1982	30	25				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1981	23					Forbes *et al.* (1985)
H406-002	Goat River	Creston	1980	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1979	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1978	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1977	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1976	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1975	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1974	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1973	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1972	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1971	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1970	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1969	15	15				Forbes *et al.* (1985)
H406-002	Goat River	Creston	1968	15	15				Forbes *et al.* (1985)

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Annexe 4 (*suite*)
Enregistrements des colonies de Grands Hérons des régions de l'intérieur de la Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H406-002	Goat River	Creston	1967	15	15				Forbes *et al.* (1985)
H406-003	Saugum Lake	Kootenay	1999	12	12				G. Tipper (comm. pers.)
H408-001	Salmo River	Salmo	1983	4	4				Forbes *et al.* (1985)
H409-001	Nancy Green Lake	Castlegar	1999	1	1				T. Antifeau (comm. pers.)
H416-001	Slocan City	Slocan	1980	5					Forbes *et al.* (1985)
H416-001	Slocan City	Slocan	1979	1	1				Forbes *et al.* (1985)
H416-001	Slocan City	Slocan	1978	1	1				Forbes *et al.* (1985)
H416-001	Slocan City	Slocan	1977	1	1				Forbes *et al.* (1985)
H416-001	Slocan City	Slocan	1976	1	1				Forbes *et al.* (1985)
H416-001	Slocan City	Slocan	1975	1	1				Forbes *et al.* (1985)
H416-002	Slocan Pool	Slocan	1980	7	5				Forbes *et al.* (1985)
H416-002	Slocan Pool	Slocan	1979	1	1				Forbes *et al.* (1985)
H416-002	Slocan Pool	Slocan	1978	1	1				Forbes *et al.* (1985)
H416-002	Slocan Pool	Slocan	1977	1	1				Forbes *et al.* (1985)
H420-001	Fort Steele	Kootenay River	1977	10					Forbes *et al.* (1985)
H421-001	Saint Mary's River	Fort Steele	1982	30	25				Forbes *et al.* (1985)
H421-001	Saint Mary's River	Fort Steele	1980	14	14				Forbes *et al.* (1985)
H421-001	Saint Mary's River	Fort Steele	1976	1	1				Forbes *et al.* (1985)
H422-001	Colvalli	Kootenay River	1970	13					Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1982	45	35				Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1981	40	35				Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1980	46					Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1979	33					Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1973	10					Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1963	25					Forbes *et al.* (1985)
H425-001	Fairmont	Columbia Lake	1941	2	2				Forbes *et al.* (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1981		0				Forbes *et al.* (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1980	10	5				Forbes *et al.* (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1979	8					Forbes *et al.* (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1978	10	0				Forbes *et al.* (1985)
H426-001	Wilmer Wildlife Area	Columbia River	1976	30					Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1981		0				Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1980		0				Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1979	6					Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1976	6	6				Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1973	12					Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1967	25	25				Forbes *et al.* (1985)
H426-002	Windermere Lake	Windermere	1963	25					Mark (1976)
H430-001	Duncan-Lardeau	Kootenay Lake	1999	20					B. Herbison (comm. pers.)

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Annexe 4 (*suite*)
Enregistrements des colonies de Grands Hérons des régions de l'intérieur de la Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H433-001	Upper Arrow Lake	Revelstoke	1982	12	12				Forbes *et al.* (1985)
H433-001	Upper Arrow Lake	Revelstoke	1981	17					Forbes *et al.* (1985)
H433-001	Upper Arrow Lake	Revelstoke	1978	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1982	4	4				Forbes *et al.* (1985)
H434-001	Golden	Golden	1980	15	15				Forbes *et al.* (1985)
H434-001	Golden	Golden	1969	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1968	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1967	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1966	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1965	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1964	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1963	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1962	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1961	1	1				Forbes *et al.* (1985)
H434-001	Golden	Golden	1960	1	1				Forbes *et al.* (1985)
H434-002	Parsons	Columbia River	1982	75	60		14	35	Forbes *et al.* (1985)
H434-002	Parsons	Columbia River	1981	65					Forbes *et al.* (1985)
H434-002	Parsons	Columbia River	1980	10	10				Forbes *et al.* (1985)
H434-002	Parsons	Columbia River	1968	1	1				Forbes *et al.* (1985)
H435-001	Brisco - north	Columbia River	1982	54	40		18	47	Forbes *et al.* (1985)
H435-001	Brisco - north	Columbia River	1981	34					Forbes *et al.* (1985)
H435-001	Brisco - north	Columbia River	1980	40					Forbes *et al.* (1985)
H435-001	Brisco - north	Columbia River	1979	28					Forbes *et al.* (1985)
H435-001	Brisco - north	Columbia River	1978	49					Forbes *et al.* (1985)
H435-001	Brisco - north	Columbia River	1974	51					Forbes *et al.* (1985)
H435-002	Brisco - south	Columbia River	1981		0				Forbes *et al.* (1985)
H435-002	Brisco - south	Columbia River	1980		0				Forbes *et al.* (1985)
H435-002	Brisco - south	Columbia River	1979	1	1				Forbes *et al.* (1985)
H435-002	Brisco - south	Columbia River	1978	15					Forbes *et al.* (1985)
H501-001	Little Horse Lake	100 Mile House	1999	30	30				R. Packham (comm. pers.)
H501-001	Little Horse Lake	100 Mile House	1998	30	30				R. Packham (comm. pers.)
H501-001	Little Horse Lake	100 Mile House	1997	30	30				R. Packham (comm. pers.)
H501-001	Little Horse Lake	100 Mile House	1996	30	30				R. Packham (comm. pers.)
H501-002	Muddy Lake	100 Mile House	1999		0				J. Steciw (comm. pers.)
H501-002	Muddy Lake	100 Mile House	1998	30	30				R. Packham (comm. pers.)
H501-002	Muddy Lake	100 Mile House	1997	30	30				R. Packham (comm. pers.)
H501-002	Muddy Lake	100 Mile House	1996	30	30				J. Steciw (comm. pers.)
H501-002	Muddy Lake	100 Mile House	1995	25	25				J. Steciw (comm. pers.)
H502-001	Fox Mt. Beacon	Williams Lake	1998	1	1				J. Steciw (comm. pers.)

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Annexe 4 (*suite*)
Enregistrements des colonies de Grands Hérons des régions de l'intérieur de la Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H502-001	Fox Mt. Beacon	Williams Lake	1994	1	1		1	4	J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1999	4	4				J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1998	4	4				J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1997		0				J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1996		0				J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1995	1	1				J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1994	1	1				J. Steciw (comm. pers.)
H502-002	Big L. - Swanson Rd.	Williams Lake	1993	1	1				J. Steciw (comm. pers.)
H502-003	Exeter Lake	100 Mile House	1999		0				J. Steciw (comm. pers.)
H502-003	Exeter Lake	100 Mile House	1998	30	30				J. Steciw (comm. pers.)
H502-003	Exeter Lake	100 Mile House	1997	30	30				J. Steciw (comm. pers.)
H502-003	Exeter Lake	100 Mile House	1996	30	30				J. Steciw (comm. pers.)
H502-004	Hawks Creek	Williams Lake	1999	0	0				J. Steciw (comm. pers.)
H502-004	Hawks Creek	Williams Lake	1998	7	7				J. Steciw (comm. pers.)
H502-004	Hawks Creek	Williams Lake	1997	7	7				J. Steciw (comm. pers.)
H502-004	Hawks Creek	Williams Lake	1996	1	1				J. Steciw (comm. pers.)
H502-004	Hawks Creek	Williams Lake	1990	4					J. Steciw (comm. pers.)
H502-005	Big Lake FSR	Williams Lake	1999	0	0				J. Steciw (comm. pers.)
H502-005	Big Lake FSR	Williams Lake	1998	12	12				J. Steciw (comm. pers.)
H502-005	Big Lake FSR	Williams Lake	1997	1	1				J. Steciw (comm. pers.)
H502-006	Chimney Lake	Williams Lake	1999	3	3				J. Steciw (comm. pers.)
H801-001	Vaseux Lake	Vaseux Lake	1983	5					Forbes *et al.* (1985)
H801-002	Hatfield's Island	Vaseux Lake	1988	1	1				O. Dyer (comm. pers.)
H801-002	Hatfield's Island	Vaseux Lake	1986	2	1				Cannings *et al.* (1987)
H801-002	Hatfield's Island	Vaseux Lake	1985	1	1				Cannings *et al.* (1987)
H808-001	Chain Lakes	Summerland	1972	1	1				Cannings *et al.* (1987)
H809-001	Island Road	Oliver	1992	3					O. Dyer (comm. pers.)
H810-001	Kelowna Airport	Kelowna	1999	6	6				L. Gyug (comm. pers.)
H810-002	Mission Creek	Kelowna	1999	5					T. Ether (comm. pers.)
H810-002	Mission Creek	Kelowna	1986	3	3				Cannings *et al.* (1987)
H810-002	Mission Creek	Kelowna	1985	3	3				Cannings *et al.* (1987)
H810-002	Mission Creek	Kelowna	1984	3	3				Cannings *et al.* (1987)
H810-002	Mission Creek	Kelowna	1983	3	3				Cannings *et al.* (1987)
H810-002	Mission Creek	Kelowna	1982	3	3				Cannings *et al.* (1987)
H810-002	Mission Creek	Kelowna	1981	3	3				Cannings *et al.* (1987)
H814-001	Jewel Lake	Greenwood	1992	3					O. Dyer (comm. pers.)
H822-001	Swan Lake	Vernon	1981	1	1				Forbes *et al.* (1985)
H822-002	Coldstream Creek	Vernon	1986	1	1				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1999	35	35				C. Siddle (comm. pers.)

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Annexe 4 (*suite*)
Enregistrements des colonies de Grands Hérons des régions de l'intérieur de la Colombie-Britannique, 1920–1999

Code d'identification de la colonie	Nom de la colonie	Localité	Année	Total des nids	Nids actifs	Taille de l'échantillon	Nombre de nids productifs	Nombre de héronneaux	Source
H822-003	Vernon city	Vernon	1998	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1997	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1996	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1995	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1994	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1993	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1992	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1991	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1990	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1989	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1988	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1987	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1986	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1985	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1984	7	7				Cannings *et al.* (1987)
H822-003	Vernon city	Vernon	1983	7	7				Cannings *et al.* (1987)
H823-001	Duteau Creek	Vernon	1983	6	6				Cannings *et al.* (1987)
H826-001	Gardom Lake	Armstrong	1946	2					Forbes *et al.* (1985)
H826-001	Gardom Lake	Armstrong	1945	2					Forbes *et al.* (1985)
H826-002	Shuswap River	Enderby	1994	20					O. Dyer (comm. pers.)
H826-002	Shuswap River	Enderby	1980	20					Forbes *et al.* (1985)
H826-002	Shuswap River	Enderby	1979	7					Forbes *et al.* (1985)
H826-002	Shuswap River	Enderby	1978	7					Forbes *et al.* (1985)
H826-003	Otter Lake	Armstrong	1980	26	23				Forbes *et al.* (1985)
H826-003	Otter Lake	Armstrong	1979	20					Forbes *et al.* (1985)
H826-003	Otter Lake	Armstrong	1977	25					Forbes *et al.* (1985)
H826-003	Otter Lake	Armstrong	1972	25	25				Cannings *et al.* (1987)
H826-003	Otter Lake	Armstrong	1963	24					Forbes *et al.* (1985)
H826-003	Otter Lake	Armstrong	1962	12					Forbes *et al.* (1985)

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